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RESEARCH ARTICLE

A STUDY TO ASSESS THE KNOWLEDGE OF PATIENTS REGARDING DOTs THERAPY

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ABSTRACT

Background: Tuberculosis cases are increasing day by day. National TB treatment guidelines strongly recommend using a patient-centred case management approach - including directly observed therapy ("DOT") - when treating persons with active TB disease. The study conducted at Taluk hospital Perumbavoor. The study will add knowledge on understanding the knowledge level of patients regarding DOTs therapy. **Need and significance of Study:** The study helps to understand tuberculosis patients regarding importance of treatment and follow up. **Materials and Method:** Cross-sectional study was conducted. Census method was used for the study. Population of the study is the patients coming under TB unit of hospital. Sample - The sample of the study is the 58 patients came for treatment in government Taluk hospital Perumbavoor, Ernakulam District. 16 questions have been used for the study. For those questions, scoring was done. Patients who answered YES, 3 score was given. For the question patients who answered NO, 1 score was given. **Hypotheses-** There is no significant relation between patients' education and knowledge about DOTs therapy. **Result:** Majority of the people have poor knowledge regarding DOTs therapy. Males are more affected with tuberculosis. Patients with above sslc qualification have more knowledge regarding tuberculosis and its treatment strategy and have good knowledge regarding DOTs therapy. Most of them know that treatment is free of cost. Therefore, there is a significant relationship between patients' education and knowledge level. **Conclusion:** The authorities should have to give more importance for patient education regarding DOTs therapy and its important.

INTRODUCTION

TB is a bacterial disease which in humans is usually caused by an organism called *Mycobacterium tuberculosis* (M. tuberculosis). The bacteria that usually cause TB in human, usually affect the lungs, but can affect other parts of the body. If you are infected with the bacteria you won't necessarily become sick, because you can have either latent TB or TB disease. TB disease is what happens when a person has latent TB and then becomes sick. Sometimes this is known as having active TB or TB disease. Most people with latent TB never become sick. Overall about 5 to 10% of people with latent TB, who do not receive treatment for it, will become sick at some time in their lives. National TB treatment guidelines strongly recommend using a patient-centred case management approach - including directly observed therapy ("DOT") - when treating persons with active TB disease. DOT is especially critical for patients with drug-resistant TB, HIV-infected patients, and those on intermittent treatment regimens (i.e., 2 or 3 times weekly). DOT means that a trained health care worker or other designated individual (excluding a family member) provides the prescribed TB drugs and watches the patient swallow every dose. Studies show that 86-90% of patients receiving DOT complete therapy, compared to 61% for those on self-

administered therapy. DOT helps patients finish TB therapy as quickly as possible, without unnecessary gaps. DOT helps prevent TB from spreading to others. DOT decreases the risk of drug-resistance resulting from erratic or incomplete treatment. DOT decreases the chances of treatment failure and relapse. A nurse or supervised outreach worker from the patient's county public health department normally provides DOT. In some situations, it works best for clinics, home care agencies, correctional facilities, treatment centres, schools, employers, and other facilities to provide DOT, under the guidance of the local health department. Family members should not be used for DOT. DOT providers must remain objective.

Epidemiology: In 2007, the number of cases of TB per 100,000 people was highest in sub-Saharan Africa, and was also relatively high in Asia. Roughly one-third of the world's population has been infected with *M. tuberculosis*, with new infections occurring in about 1% of the population each year. However, most infections with *M. tuberculosis* do not cause TB disease, and 90-95% of infections remain asymptomatic. In 2012, an estimated 8.6 million chronic cases were active. In 2010, 8.8 million new cases of TB were diagnosed, and 1.20-1.45 million deaths occurred, most of these occurring in

developing countries. Of these 1.45 million deaths, about 0.35 million occur in those also infected with HIV.

MATERIALS AND METHODS

cross sectional study was administered. The Population of the study is the patients coming under government Taluk hospital perumbavoor, Ernakulam District during the period of march 13-30. Among this 58 patients were selected as sample. T test was applied for data analysis. Scoring Techniques used: 16 questions have been used for the study. Based on that scoring was done. Score 16-32 were poor wreness, 33-48: good awareness.

Objectives

- To evaluate the knowledge level of patients regarding TB.
- To assess the knowledge level and demographic variables.
- To evaluate the knowledge level of patients regarding DOTS therapy(its duration, cost of treatment)

Hypothesis: There is no significant relation between patients' education and knowledge about dots therapy.

ANALYSIS AND INTERPRETATION

Awareness regarding DOTS therapy: Among the population 37.93% of patients have poor knowledge regarding DOTS therapy and only 62.06% of patients are aware about DOTS therapy. From the table it is clear that most of them have poor knowledge regarding DOTS therapy.

Treatment at free of cost: 82.71% of patients have good knowledge regarding the treatment cost and 17.24% of patients have poor knowledge regarding the treatment cost.

Who all can deliver TB drugs: 20.6% patients have knowledge regarding that who all can deliver tuberculosis drug and 79.3% of patients have poor knowledge regarding the delivery of drug.

Awareness regarding the side effect of drug: 75.86% of patients have good knowledge regarding the side effect of treatment and 24.13% of people have poor knowledge regarding that.

Regular intake of drug without any change: 29.31% have good knowledge that drug has to be taken regularly and 70.6% of patients have poor knowledge regarding that.

DOTS therapy is effective for the control of disease: 56.89% of patients have good knowledge regarding that DOTS therapy is effective for the control of tuberculosis and 43.10% of patients have poor knowledge regarding that.

Patients Gender and Knowledge regarding DOTS therapy: From the study 41.37% have good knowledge and which include 33.83% are males and 24.16%are female. Among the sample population 58.6% have poor knowledge out of which 46.05% are males and 11.94% are female's. It is clear that males have poor awareness.

Patient Education and Knowledge

Knowledge	good	poor	Total
Patient education			
Below sslc	13(18.62%) (28.70%)	24(34.37%)	37(69.81%)
Above sslc	11(36.43%) (24.29%)	5(16.56%) (9.13%)	16(30.18%)
Total	24(45.28%)	29(54.71%)	53

Patient education and their knowledge regarding DOTS therapy, among the sample 69.81% studied below SSLC and out of which about 18.62% of them have good awareness, 34.37% have a poor knowledge respectively. Among the sample 30.18% of patients studied above SSLC and of them about 36.43% of them have good knowledge, 16.56% have poor knowledge respectively.

Hypothesis testing: Calculated value (5.09) is greater than table value. So hypothesis is accepted. Therefore, there is a significant relationship between patients' education and knowledge level.

RESULTS AND DISCUSSION

Among the sample 62.06% has poor knowledge regarding DOTS therapy. 75.86% of patients have good awareness regarding the side-effect of DOTS therapy and 70.6% of patients have a poor knowledge regarding the regular intake of drug. From the study it is clear that 82.71% have good awareness that treatment is at free of cost. 79.3% of patients have poor knowledge regarding the delivery of drug. 58.6% have poor knowledge out of which 46.05% are males and 11.94% are female's. It is clear that males have poor awareness. 56.89% of patients have good knowledge that DOTS therapy is effective for the control of disease. There is a relationship between patients educational status and knowledge level.

Conclusion

From the study it is clear that majority of patients have poor awareness regarding DOTS therapy and its importance. Patients with educated and young. patients have very good awareness. Majority of the patients have good awareness regarding the signs and symptoms of disease. The authorities should have to give more importance for patient education regarding DOTs therapy and its important.

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