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A Prospective Study on Anti Tubercular Therapy and Management of ADR in Special Population Followed by Awareness and Suggestions on Improving Health Related Quality of Life

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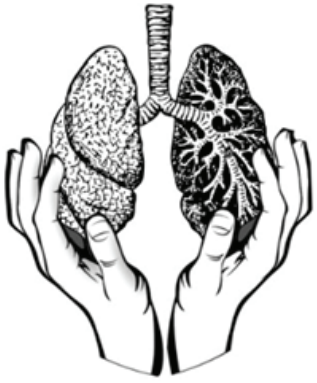
INTRODUCTION

Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis. It is spread through the air by a person suffering from TB. A single patient can infect 10 or more people in a year [1]. Tuberculosis mostly affect adults in their most productive years. However all age groups are at risk. People who are infected with HIV are 20-30 times more likely to develop active TB. The risk of active - TB is also greater in persons suffering from other conditions that impair the immune system [2-5].

Too many people have undetected tuberculosis for too long; late detection of TB increases the risk of transmitting the disease to others, having poor health outcomes, or that they and their family will suffer distress and economic hardship. The burden of TB is declining slowly worldwide, but progress in controlling TB and mitigating its consequences could be expedited if programs focused on providing early diagnosis and treatment [1-12].



TUBERCULOSIS IN INDIA

India is one of the countries with highest burden of TB. In India 21.32 lakh new cases are reported per annum. Tamil Nadu is the only south Indian state to report high number of new cases. Tamil Nadu stands sixth in the country in detection of new TB cases with 1.03 lakh new cases annually [3].

ABOUT THE STUDY

Aim

To study about the anti-tubercular therapy and management of adverse drug reactions in special population (Patients having TB along with Diabetes, HIV, Kidney disease and liver disease) and to promote awareness on better management of disease and improving health related quality of life.

Objective

- To analyze, management of TB in special population (Patients having TB along with Diabetes, HIV, Kidney disease and liver disease).
- To determine ADR associated with anti-tubercular agents and its management.
- To promote awareness on better management of disease and improving health related quality of life via patient counseling.
- To evaluate the outcome of our studies.

METHODOLOGY

Site of Study

This study was conducted in Govt. Head Quarters Hospital, Krishnagiri

Study Department

The study was conducted in the departments of general medicine, TB department.

Study Design

This was a prospective study was conducted using TB patients.

Study Plan

A prospective study on anti-tubercular therapy and ADR management in special population by collecting the details from the patients using a pro forma.

Duration of Study

This study was conducted from the period of 6 months

Study Population

The inpatients who having TB along with diabetes, kidney and liver disease, and HIV of Govt. Head Quarters Hospital, Krishnagiri were considered in this study.

Sample Size

89 cases were taken based on inclusion exclusion criteria from Krishnagiri Government Hospital.

Inclusion Criteria

Inpatient and outpatient of TB cases in special population diagnosed at Krishnagiri Government Headquarters Hospital. Patients with age above 18.

Exclusion Criteria

- Cases of incomplete data.
- Psychotic patients.
- Patients those who are not coming under special population.
- Patients those who do not have correct follow up.

Data Collection Procedure

Data's were collected from the patient prescription of TB ward which include past medication, coexisting disease, medical history, diagnostic methods and information about medication adherence etc. From the collected data Performa's got filled and daily documentation was done. Follow up of the subjects were taken periodically based on their hospital visiting.

Ethical Consideration

The study received ethical clearance from the institutional ethical committee. Permission to do the study was granted by the Joint Director Medical Officer and Chief Doctor in the department of geriatric patients at Govt. Head Quarters Hospital Krishnagiri.

Data Treatment and Analysis

Data's were collected and analyzed by using Sf-36 questionnaire and Ortho tool kit. The data obtained were entered in SPSS software& analyzed. Results were expressed in absolute number, percentages and averages. The data were analyzed <0.05 is considered as significant.

RESULT OF STUDY

Based on inclusion and exclusion criteria, a batch of 89 patients were screened and obtained their consent for studies. Out of the 89 patients selected, 5 patients were expired and 4 patients were discontinued the treatment during the study period, So that only 79 patients participated in the study by taking correct follow up and attending the patient counselling sessions.

OUT COME OF ADR MANAGEMENT

Out of 79 patients 76 were reported with ADR. The ADRs were minor and symptomatic management were usually adopted to fix those conditions:

S. No	Outcome of ADR	Number of patients	Percentage
1	Continuing	5	6.6
2	Recovering	21	27.6
3	Recovered	45	59.2
4	Unknown	5	6.6
	Total	76	100

Treatment Outcome

S .No	Treatment phase	Number of patients	Percentage
1	Cured	18	23
2	Intensive phase	13	16
3	Continues phase	48	61
	Total	79	100

MEAN QUALITY OF LIFE ASSESSMENT

I. Paired sample statistics

		Mean	N	Std. Deviation	Std. Error Mean
1	QoL before counselling	49.1337	79	8.35076	0.93953
2	QoL after counselling	50.7397	79	9.17971	1.03280

II. Paired samples test

		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
1	QoL score before counselling	-1.60608	4.73921	.53320	-3.012	78	.003
2	QoL score after counselling						

CONCLUSION

Tuberculosis is an infectious disease caused by mycobacterium tuberculi. TB in special population (patients having TB along with diabetes, HIV, kidney and liver disease) requires special attention. Because, the coexisting illness may affect the treatment methods and clinical outcome. The TB drug itself cause several ADR which leads to poor therapeutically outcome. Most of the ADRs caused by anti-tuberculos drug are mild and symptomatic management is sufficient to fix the condition. The pharmacist can play a major role in improving the patient's knowledge and compliance towards the anti –TB therapy and successful management of ADRs by giving effective patient counseling thereby the patient can improve their quality of life as well.

In this study we found that patient education and awareness relating to the adverse drug reactions of the therapy and importance of complete adherence with the therapy is mandatory to improve the health related quality of life of the study population. Hence through this study we conclude that with a better ADR management and patient counselling we can eradicate TB, make our nation a TB free zone. "IT'S TIME TO END TB".

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