Profile of Beneficiaries Attending DOTS Centre of A Tertiary Care Hospital of Jharkhand

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Abstract:

Background: *India has the highest burden of tuberculosis in the world accounting for one-fourth of the estimated global incident TB cases. DOTS (Directly observed treatment short course) chemotherapy is defined as a strategy to ensure cure from tuberculosis by providing the most effective medicines and confirming that it is taken.* ***Objectives:*** *This study aims to describe the socio-demographic profile and smoking & drinking habits of patients attending DOTS centre of Rajendra Institute of Medical Sciences (RIMS), Ranchi.* ***Materials and Methods:*** *This is a cross sectional hospital based study. All registered TB patients coming to DOTS centre of RIMS, Ranchi during our study period and willing to participate in study were included. Duration of study was 3 months. Total sample size for this period was 211. Templates were generated in MS Excel and data analysis was done using SPSS software.*

Result and conclusion: *After analysis of 211 subjects it was found that majority were males (71.57%) in the age group 21-40 years (48.82%) belonging to non tribal communities (81.04%) having literacy level of primary grade(43.60%). Overcrowding accounted to 68.25% cases. Smokers accounted to 56.40% cases whereas alcoholics were 42.19%. TB is far more common in non tribal males in the age group 20-40. Half of the cases are smokers.*

Keywords: *Profile, DOTS, TB.*

I. Introduction

Tuberculosis is completely curable through short-course chemotherapy. Treating TB cases who are sputum-smear positive (and who can therefore spread the disease to others) at the source, it is the most effective means of eliminating TB from a population.

According to WHO Global TB Report, 2015, out of estimated global annual incidence of 9.6 million TB cases, 2.2 million were estimated to have occurred in India.[1]

DOTS (Directly Observed Treatment Short Course) is defined as a strategy to ensure cure by providing the most effective medicine and confirming that it is taken. DOTS is the internationally recommended strategy for TB control that has been recognized as a highly efficient and cost-effective strategy. DOTS comprises five components which are Sustained political and financial commitment, Diagnosis by quality ensured sputum-smear microscopy, Standardized short-course anti-TB treatment (SCC) given under direct and supportive observation (DOT), a regular, uninterrupted supply of high quality anti-TB drugs and Standardized recording and reporting.[2]

In DOTS, during the intensive phase of treatment a health worker or other trained persons watch as the patient swallows the drug in his presence. During continuation phase, the patient is issued medicine for one week in a multi blister combi-pack of which the first dose is swallowed by the patient in the presence of health worker or trained person. The consumption of medicine in the continuation phase is also checked by the return of empty multi blister combi-pack, when the patient comes to collect medicine for next week. Drugs are provided in patient wise boxes with sufficient shelf life. In the program alternate day treatment is used. The cornerstone of successful DOTS therapy is adequate and regular drug intake.[3]

As the occurrence of TB is affected by socio-demographic profile of a patients and smoking is it's risk factor so an attempt is being made to describe the socio demographic profile and smoking & drinking habits of patients attending DOTS centre of Rajendra Institute of Medical Sciences (RIMS), Ranchi in this study.

II. Material & Methods

This was a cross sectional hospital based study conducted at the DOTS centre of RIMS, Ranchi. Total during of study was 3 months (August 2016 to October 2016). All patients registered for TB coming to DOTS Centre RIMS Ranchi from 16th August 2016 to 15th October 2016 and willing to participate in our study were

selected. A total of 211 patients were selected consecutively for the study. Templates were generated on MS Excel sheet and data was analyzed using SPSS software (version 20).

III. Results

Out of 211 subjects studied most common affected age group was 21-40 years (48.82%) followed by 40-60 years (25.12). More than 2/3 rd of the patients were male (71.57%) and from rural area (72.99%). Overcrowding was present in the house of 68.25% patients. Most patients were having primary level of education (43.6%) and belonged to Class V of Socio Economic Status (55.46%). Nature of occupation of patients of DOTS centre has been depicted in Table 2. We found that industrial workers were most affected group (32.7%) followed by labors (29.85%). Out of 211 study subjects 56.4% were smokers and 42.19 % were alcoholics.

Table 1: Socio-demographic profile of DOTS patients

		Frequency (n=211)	Percentage (%)
Gender	Male	151	71.57
	Female	60	28.43
Age	< 20 years	30	14.22
	21-40 years	103	48.82
	41-60 years	53	25.12
	>60 years	25	11.84
Ethnicity	Tribal	40	18.96
	Non-Tribal	171	81.04
Residence	Rural	154	72.99
	Urban	57	27.01
Literacy	Illiterate	37	17.54
	Primary	92	43.6
	Secondary	50	23.7
	Higher Secondary	32	15.16
	Graduation & above	0	0
Socio-economic Status (Modified BG Prasad classification April 2016)	Class I	0	0
	Class II	0	0
	Class III	19	9
	Class IV	75	35.54
	Class V	117	55.46
Overcrowding at home	Present	144	68.25
	Absent	67	31.75

Table 2: Occupation of patients attending DOTS centre

Occupation	Frequency (n=211)	Percentage (%)
Government Job	4	1.9
Private Job	9	4.26
Industrial Workers	69	32.7
Agricultural Workers	35	16.59
Labor	63	29.85
Others	31	14.7

Others – Drivers, self employed etc.

Table 3: Smoking and Drinking Trends of DOTS patients

Trend		Frequency (n=211)	Percentage (%)
Smoking	Smoker	119	56.4
	Non-smoker	92	43.6
Alcohol Intake	Alcoholic	89	42.19
	Non-Alcoholic	122	57.81

IV. Discussions

In a similar study done by Jethani . S. et al, 74.9 % subjects were male whereas 26.1 % were females.[4] In comparison to that, in our study male subjects were 71.56 % and female subjects were 28.43 %.Mohsin et al's study conducted in Karachi found that 48.8% subjects were addicted to smoking and 38.83% subjects were alcoholics.[5]In our study, 56.39 % subjects were smokers and 42.18 % subjects were alcoholics.In another study conducted by Department of Community Medicine RIMS Ranchi Jharkhand India it was found that, smear positive cases maximum were from age group more than 65 years (62.5%).[6] In our study the maximum number of smear positive cases were found to be among the age group of 21 – 40 years (48.81%).

V.   Conclusion

In our study we concluded that TB is far more common in males and the disease is more prevalent in the age group of 20 – 40 years. Majority of the patient belong to rural background and were of non tribal ethnicity. Most of the patient had received primary education and were industrial workers. Most of the households were overcrowded. Almost half of the patients were of low socio economic status. Approximately half of the patients were addicted to smoking.

Acknowledgements

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