Sindh Univ. Res. Jour. (Sci.Ser.), Vol: 34-(1) 51 -56 (2002)

A RESEARCH SURVEY OF TWO THICKLY POPULATED AREAS OF HYDERABAD AND KHAIRPUR DISTRICTS OF SINDH

Ozra Ahsan, M. Khalilur Rehman, Abrar Ali Khan*, Abdullah Jan Pathan* and Akhtar Hussain

Department of Pharmacy, University of Sindh, Jamshoro, 76080

Abstract

A survey has been carried out in two thickly populated area of Kalimori (Hyderabad) and Faizgang (Khairpur) with the help of questionnaire forms and person visits. A total of 116 patients were interviewed .Out of them 63 were from Kalimori and 53 were Faizgang Out of 116 subject, 45 were females defaulter cases were 111 (95.7%) patients were not vaccinated. 71 (61.2%) patients have acquired infection from their family members. 95% female patients claimed that they were not allowed to visit hospital regularly due to social constraints 96.9% patients have no knowledge or awareness about the causes and control of the disease .

The study reveals that propagation of the disease can be controlled by improving personal hygiene, proper vaccination, social awareness, extensive teaching programmes through communication medias and direct monitoring of patients by the health professionals and N. G. O'. s.

Keywords: Predisposing factors for Pulmonary Tuberculosis in Pakistani Community.

Introduction

Tuberculosis is still a major public health problem all over the world, particularly in developing countries. Of the world population, one third is infected with it's bacillus, while ten percent of this infected population is likely to develop disease during their life – time. It's magnitude has increased by the HIV epidemic and is posting new threat to T.B. control activities by emergence of multi-drug resistant mutants[5].

Pakistan being a developing country is badly affected by the present global wave of tuberculosis. It harbors half of the cases of Eastern Mediterranean Region [EMRO] to which it belongs[10]. The causative organism of tuberculosis is the mycobacterium tuberculosis which is an aerobic slowly growing bacillus and spreads throughout droplet inhalation[9]. The survey was planned conducted to determine different factors, which predispose tuberculosis control in this part of the world.

Patients and Methods

One hundred and sixteen patients were randomly interviewed from two thickly populated localities of Faizgang district Khairpur and Kalimori of district Hyderabad. Among these 63 were from Hyderabad ,while 53 were from Khairpur. 45 of them were women. These patients were selected by personal visits to the areas and a contact with families, local shopkeepers, hospital history records, local d0ctors and personal interviews

A questionnaire was made [Table -1] and it was filled through personal interviews by visiting the patients at his/her own home. The addresses and thumb impressions of the subjects were also recorded .

* Institute of chest diseases, Kotri, Sindh ,Pakistan

Results and Discussion.

The compilation of data obtained from the questioner of 116 individuals are presented in Table II – IX.

The smear–positive sputum is the main source of infection responsible for the persistence of disease in the community[6]. Other factors which predispose to disease are malnutrition, poor housing conditions with overcrowding[3], certain occupations giving rise to silicosis[7], alcoholism, cigarette smoking, immunity compromised diseases like HIV[4], steroid[8], and immune suppressive drugs and certain medical disorders like diabetes[1] etc .

With regards to all above mentioned factors and other Socio-Economical problems prevalent in out society were addresses in the questionnaire. The over all data revealed that the average age of theses patients was 35SD +12, which is the most productive age of an individual for his/her family and community and it's loss will lead to innumerable Soci-Economic consequences. Seventy One (61.2%) (Table II) of them had a positive contact history of tuberculosis from family members. Average calculated area per person at their respective houses was 12.36 Sq. ft. (Table IV) Only five (4.3%) (Table II) of these patients completed chemotherapy for tuberculosis for the advised duration; while rest of 111(95.69%) defaulted at some stage of their treatments.

All these indicate that treatment of tuberculosis which is a sine qua non for prevention was inadequate and over crowding spreads infection to other family members as well. In continuing treatment the most important is the purchasing capability of the patients. In our series the average monthly income of an individual in the month of March/April 1996 was Rs.1150/- while the cost of drugs per individual per month was Rs. 540/- (Table VIII) Drug addicts are very likely to have more pulmonary disorders than non-addicts. Among the series of 116 patients, more than half of the cases were smokers Table-V,VII) while, 25% of them were addicted to heroin and charas .

Certain taboos are an obstacle for women in getting regular treatment at the hospital Forty Three (95.6%) (Table–XI) women were denied or discouraged to visit the hospital for regular treatment by their parents, husbands and guardians. The main cause of this taboo is a very low literacy rate (Table-III) among the communities. Also the awareness about the tuberculosis is scarce. When asked about the fate of sputum which they cough up, 95.7% had no knowledge (Table-V) about where to dispose of their sputum.

We conclude that an effective case finding based on sputum microscopy, free anti-tuberculosis treatment under direct observation to ensure regular drug intake and completion for entire prescribed duration, proper health education delivery and control over drug will be effective measure to control T.B. in this community.

MODEL OF QUESTIONNAIRE

PERSON TO PERSON HOME SURVEY OF COMMUNITY FOR T.B. CONTROL AND PREVENTION

AREA: _____

Personal Record Data No:

1. Name _____
2. S/o, D/o, W/o _____
3. Cast _____
4. Religion _____
5. Age _____
6. Sex _____
7. Martial Status: Married/Unmarried _____
8. No. of Family members _____
9. Type of Occupation _____
10. Total area of house in Sq. Ft. _____
11. Average monthly income per person in the family in Rs. _____
12. Average monthly expenditure for purchasing of drugs/person _____
13. Vaccinate: Yes/No _____
14. Names of Drug taken _____
15. Education: Illiterate/Primary/Secondary/ Graduate.
16. Addiction: Betel/Tobacco/Alcohol/Heroin/Bhang/Chars _____
17. Treatment Taken Yes/No Complete/Incomplete.
18. Do any of your family member(s) has T.B. Yes/NO.
19. Duration of Disease: _____
20. Duration Treatment _____
21. Defaulter Yes/No.
22. Reasons of Defaulter: Monitory problem/Social Problem/Unawareness of Disease.
23. Need of Treatment Yes/No.
24. Other Diseases: Diabetic/Cardiac Problem/Urinary Problem/Ulcer/Psychological Problem.
25. Medication taken by the patient other then anti T.B. Drugs _____
26. Where do you dispose your sputum: Inside the house/In a specific pot and then burn it; or cover it with soil etc./In front of the house/Every where.
27. Signature/Thumb impression of the patient _____

FOR FEMAL PATIEN ONLY:

1. Source of financing to purchase the drugs:
   Self /Husband/ Parents/Brothers/Guardian.
2. Do your parents/husband/brothers/guardian usually allow you to visit hospital for treatment regularly: Yes/No.
   a) If not why: _____
3. Signature/Thumb Impression of the patient: _____

Table - I

STUDY/ INTERFERENCE	FAZIGANG KHAIRUR N=53				KALIMORI,HYDERBAD N=63			
	Male (34)		Female (19)		Male (42)		Female (21)	
	YES	NO	YES	NO	YES	NO	YES	NO
No of persons vaccinated %	2 8.3 %	32 91.7%	0 0	19 100 %	5 11.9%	37 88.10%	2 9.5%	19 90.5%
Family member(s) having T. B%	23 54.2 %	11 45.8%	14 73.7%	5 26.3%	19 45.2%	23 54.8%	15 71.4%	6 28.6%
Defaulter %	34 100 %	0 0	19 100 %	0 0	37 88.1%	5 11.9%	21 100%	0 0

Table - II

Comparative analysis of two Cohorts with reference to vaccination, other family members suffering from T.B. and default in treatment.

n = 116

FAIZGANG, KHAIRPUR N=53				KALIMORI, HYDERABAD			
Male (34)		Female (19)		Male(42)		Female (21)	
Literate	Illiterate	Literate	Illiterate	Literate	Illiterate	Literate	Illiterate
3 12.5%	31 87.5%	0 0	19 100%	11 26.2%	31 73.8%	2 9.5%	19 90.5%

Table - III

Education

n = 116

Total Number of Patients	Total Number of \family Members	Range of Family Members	Range of Total home area in \Sq.\Ft.	Total Area of Houses in \Sq.\Ft.	Average Area 116 Houses in Sq.Ft.	Calculated Area for a single person Sq.Ft.
116	273	1-20 Persons/ Family	42-384 Sq.Ft.	391662.73 Sq.Ft.	39162.73 273=1434.7	1434.7 11.67 =12.37 Sq.Ft.

Table - IV

Average area per Person in the house in Sq.Ft.

Where do you dispose your sputum	Inside house	Infront of the house	In a specific pot And then burn it or cover it with soil	Everywhere
	4 3.4 %	13 11.2 %	5 4.3 %	94 81.1 %

Table – V
Disposal of sputum
n =116

FAIZGANG, KHAIRPUR N=53				KALIMORI, HYDERABAD			
Male (34)		Female (19)		Male(42)		Female (21)	
Addicted	Non-Addicted	Addicted	Non-Addicted	Addicted	Non-Addicted	Addicted	Non-Addicted
29 79.2%	5 20.8%	8 42.1%	11 57.9%	36 85.7%	6 14.3%	6 14.3%	3 14.3%

Table – VI
Addiction
n =116

Tobacco	Betel/Nashawar	Alcohol/Bhang	Other Drugs Heroin Charas	Non-Addicted
67 57.8%	16 13.8%	2 1.7%	3 3 5.2%	25 21.6%

Table – VII
Type of Addiction
n =116

Average Monthly Income/Person in Rupees	Monthly Expenditure for Purchasing Drugs/Person In Rupees
Rs. 1050	Rs. 540 (Rs. 18 daily)

Tale – VIII
Socio-Economic conditions by March/April 1996

STUDY	YES	NO
Do you parents/husbands/guardians allow you to visit the hospital regularly for treatment	2 4.4 %	43 96.6 %

Table – IX
Social constraints of the women patients

References

[1]. Hendy M, Stablefort D (1983) the effect of established diabetes mellitus on the presentation of infilrative pulmonary Tuberculosis in the immrigant Asian community of an inner city area of U.K. Br. J IS CHEST 77,87.

[2]. IUAT/WHO study group (1982) Tuberculosis control, Tuberculosis control, Tubercle 63,157.

[3]. Patel. K.R. (1985) Pulmonary tuberculosis in residents of lodging houses, night shelters and common hostels in Glasgow, a 5 years prospective study. Br.J. Dis chest 79,60.

[4]. Pt Chnik AE, Burrj Suarez M. et. al (1987) Human T Cell Lymphotropic virus III (H TLV – II) Scropositivty and related disease among 71 cosecutive patients in whom tuberculosis was diagnosed Am Rev Respir Dis chest 135, 875.

[5]. "The Prescriber" published by the UNICEF corporation with the internal course of health mangers. !STISAN (italy) 1994.

[6]. Seaton A; Seaton D, leitch AB; Crofton and Douglas's Respiratory Disease (1989) p. 404.

[7]. Snjder DE (1978) the relationship between tuberculosis and silicosis. Am Rev Respiratory Dis 118, 455.

[8]. Sohn SA, Lakshminarayan S (1976) Tuberclosis after corticisteoids therapy. Br. J Dis Chest 70, 195.

[9]. Wells WF, Ratcliffe HL, Crumb C (1984) on mechanim of droplet nuclei infection. Am J Hyg 47, 11.

[10]. WHO/Tub/91.158.