Original Research Article

Psychosocial impact on patients with chronic lymphatic filariasis: A cross-sectional study

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Abstract

Background: Lymphatic filariasis is a mosquito-borne parasitic disease found throughout the tropics and in some sub-tropical areas world-wide. The chronic manifestations of filariasis can have significant, and often very negative social impacts. **Aim and Objective:** To study the psychosocial factors among chronic lymphatic Filariasis patients. **Material and Methodology:** The present cross sectional descriptive study conducted in the field practice area of Rural Health Center (RHC) of MNR Medical College in Medak district of Telangana State. A total of 230 patients with chronic lymphatic filariasis in all age group were included in the study. A questionnaire (pre-tested, open and closed ended questions) was developed by a group of experts including a psychologist, a psychiatrist, a sociologist and a public health specialist. The questionnaire was adapted from Euro Scale and WHO quality of life Scale. Statistical analysis was done by using proper test at appropriate places. **Results:** Out of 230 patients 68 (29.57%) were from the age group of 51 to 60 with male predominance (58.26%). Among the patients, 34 (14.78%) patients were unemployed. It was found that, 21(9.13%) patients feel depressed while 141 (61.30%) patients perceived it as a major problem. In around 68 (29.56%) patients, disease was perceived as social stigma and 76 (33.04%) patients feel shy about the disease. **Conclusion:** Hence, along with creating awareness regarding prevention and control of Lymphatic Filariasis proper physical rehabilitation of the patients and psychological support should be given at the family as well as community level to decrease the extent of problem.

Key Words: Lymphatic Filariasis, Psychosocial Impact, psychosocial factors.

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INTRODUCTION

Lymphatic filariasis is a parasitic mosquito-borne disease found throughout the tropics and in some sub-tropical areas world-wide.[1] It is so disfiguring and the accompanying infections so distasteful that people are ashamed to go public. Consequently they isolate themselves from society. People infected by the disease find it difficult to get a job. There is a high rate of separation or divorce among discordant couples. [2] Lymphatic filariasis is accounted as one of leading cause of long-term disability in the world. Even though filariasis is not a fatal disease, the social and economic burden to the affected individuals, their families and the endemic communities is sever. The current estimate reveals that 120 million people in 83 countries of the world are infected due to lymphatic filarial parasites. It is estimated that more than 1.1 billion (20% of the world's population) are at risk of acquiring infection. According to the World Health Organization about 70% of the infection worldwide is contributed by India, Indonesia, Nigeria and Bangladesh alone contribute. [3] The chronic manifestations of filariasis can lead to significant and usually very negative social impacts. [4] The chronic disability caused due to filariasis are lymphoedema of the limbs, breasts and external genitalia and these disabilities

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also have a profoundly detrimental effect on the quality of life among the affected individuals. Thus, the present study was conducted to study psychosocial factors among chronic lymphatic Filariasis patients.

MATERIAL AND METHOD

The present cross sectional descriptive study was conducted in the field practice area of Rural Health Center (RHC) of MNR Medical College in Medak district of Telangana State. The study was conducted from Feb-2013 to Jan 2014. All patients with chronic lymphatic filariasis in all age group were included in the study. Patients not willing to participate in the study and unable to understand/ answer questions asked in questionnaire were excluded. Among three PHC under Rural Health Center one PHC was randomly selected. The patients with lymphatic filariasis enrolled for treatment at PHC during the study period of one year were taken into study. A total of 230 patients were enrolled for treatment was included in the present study. A questionnaire (pre-tested, open and closed ended questions) was developed by a group of experts including a psychologist, a psychiatrist, a sociologist and a public health specialist. The questionnaire was adapted from Euro Scale and WHO quality of life Scale. [5] Face validity was assessed by an independent group who considered the questionnaire to be able to detect psychosocial impact. The questionnaire was pretested. The principal investigator administered the questionnaire. Psychosocial problem score was arbitrarily graded as follows.

Table 1:

Score	Percentage	Problem
0-37	0-35%	No Problem
38-63	36-60%	Mild Problems
68-84	61-80%	Moderate Problems
85-105	81-100%	Severe Problems

To find out the association between mean psychosocial problem score with selected demographic variables, Chi-square test and other tests were used.

RESULTS

Table 1: Distribution of Lymphatic Filariasis Patients according to Demographic Profile:

Demographic characteristics		No of Patients	Percentage
Age group (years)	≤10	02	00.87
	11-20	12	05.22
	21-30	18	07.83
	31-40	34	14.78
	41-50	44	19.13
	51-60	68	29.57
	Above 60	52	22.60
Gender	Male	134	58.26
	Female	96	41.73
Socieconomic Status	I	03	01.30
	II	12	05.22
	III	47	20.44
	IV	76	33.04
	V	92	40.00
Education	Illiterate	35	15.21
	Primary Schooling	105	45.65
	Secondary Schooling	71	30.87
	Graduate	16	06.96
	Postgraduate	03	01.31

From the table 1, it was observed that, out of 230 patients 68 (29.57%) were from the age group of 51 to 60 years followed by 52 (22.60%) above 60 years. In the above table, majority of patients with chronic lymphatic filariasis were male 134 (58.26%) while females were 96 (41.73%). It was observed that 92 (40%) patients were from class V followed by 76 (33.04%) patients from class IV. It was seen that majority of patients 105 (45.65%) were only educated up to primary schooling while 35 (15.21%) patients were illiterate.

Table 2: Distribution of Patients on basis of Duration of Illness:

Duration Of Illness	Male (%)	Female (%)	Total (%)
< 1 year	02 (01.49)	01 (01.04)	03 (01.30)
1-2	26 (19.40)	18 (18.75)	44 (19.13)
2-3	48 (35.82)	32 (33.33)	80 (34.78)
3-5	35 (26.12)	29 (30.21)	64 (27.83)
>5	23 (17.17)	16 (16.67)	39 (16.96)
Total	**134 (100)**	**96 (100)**	**230 (100**

The majority of patients 80 (34.78%) were suffering disease since 2-3 years, while 64 (27.83%) and 39 (16.96%) patients were suffering since 3-5 years and more than 5 years respectively.

Table 3: Distribution of Patients according to Psychosocial Problems:

Psychosocial Problems	Frequency	Percentage
No Problems	14	06.09
Mild	134	58.26
Moderate	64	27.82
Severe	18	07.83
Total	**230**	**100**

It was observed from above table that according to Psychosocial scale mild, moderate and severe problems were seen in 134 (58.26%), 64 (27.82%) and 18 (7.83%) patients respectively. In 14 (6.09%) patients the scale shows no problems.

Table 4: Distribution according to psychosocial impact on patients of chronic lymphatic Filariasis:

Psychosocial impact	No. of patients	Percentage
Difficulties in interacting with categories of society		
Family (n=230)	13	05.65
Community (n=230)	18	07.82
Friends (n=230)	48	20.86
Work mates (n=154)	39	25.32
Patients feelings regarding the disease		
Feeling shy (n=230)	76	33.04
Severely restricting daily activities (n=230)	62	26.95
Social stigma (n=230)	68	29.56
Perceived as major problem (n=230)	141	61.30
Depressed (n=230)	21	09.13

It was found that, 21(9.13%) patients feel depressed while 141 (61.30%) patients perceived it as a major problem. In around 68 (29.56%) patients, disease was perceived as social stigma and 76 (33.04%) patients feel shy about the disease.

DISCUSSION

The present study was a cross sectional descriptive study conducted in the field practice area of RHC to study the psychosocial factors among chronic lymphatic Filariasis patients. A total of 230 patients were enrolled for treatment was included in the present study. The questionnaire was adapted from Euro Scale and WHO quality of life Scale. In the present study, out of 230 patients 68 (29.57%) were from the age group of 51 to 60 with male predominance (58.26%). It was observed that majority 92 (40%) patients were from class V and were engaged in unskilled occupation (41.74%). Among the patients, 34 (14.78%) patients were unemployed. It was seen that majority of patients 105 (45.65%) were only educated up to primary schooling while 35 (15.21%) patients were illiterate. Similar findings were seen in study by Rajagopalan P.K *et al* [6] Pondicherry, South India, were filariasis was higher in males compared to females. In the study carried by R.S. Wijesinghe *et al*[7] majority of people were engaged in non agricultural labourer (11.1%) suffering from chronic lymphoedema. It was observed that according to Psychosocial scale mild, moderate and severe problems were seen in 134 (58.26%), 64 (27.82%) and 18 (7.83%) patients respectively. In 14 (6.09%) patients the scale shows no problems. In the study by Krishna Kumari A. *et al*[8] to assess the physical and psychosocial burden due to lymphatic filariasis as perceived by patients and medical experts found that people with higher grades of lymphoedema and hydrocele had more severe psychosocial problems than physical ones. It was found that, 21(9.13%) patients feel depressed while 141 (61.30%) patients perceived it as a major problem. In around 68 (29.56%) patients, disease was perceived as social stigma and 76 (33.04%) patients feel shy about the disease. In the study by R.S. Wijesinghe *et al*[7] to describe the physical disability and psychosocial impact associated with chronic lymphoedema found (8.5%) patients reported feelings of depression. They reported that patients were feeling inconvenience in wearing long garments all-time to hide the swollen lower limbs. They are not able to wear normal foot wear. They feel being a burden to the family, fear of transmitting disease to family, inability to do a job, intense fear of being rejected by society, worried about not being able to get married due to the swollen limb and that their whole life changed due to the illness.

CONCLUSION

Lymphatic filariasis is still one of the important cause of social stigma in rural parts of India. Hence, along with creating awareness regarding prevention and control of Lymphatic Filariasis proper physical rehabilitation of the patients and psychological support should be given at the family as well as community level to decrease the extent of problem.

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