



ORIGINAL RESEARCH PAPER

Medicine

A STUDY OF SOCIO-DEMOGRAPHIC & MORBIDITY PROFILE OF LYMPHATIC FILARIASIS PATIENTS WITH LYMPHOEDEMA IN WARANGAL RURAL, TELANGANA.

KEY WORDS: monitoring in anaesthesia, circulation, oximetry, capnography, depth of anaesthesia, neuromuscular block.

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ABSTRACT

INTRODUCTION: Lymphatic Filariasis is a parasitic infection that can result in an altered lymphatic system and the abnormal enlargement of body parts, causing pain and social stigma. It's one of the most disabling of all diseases (WHO) 6. In India, high prevalence was found in 21 states including 256 districts, this includes Telangana and Andhra Pradesh of which 47,000 people are suffering from lymphatic Filariasis in telangana⁸. Lymphatic Filariasis is one of the six eradicable diseases in the world and goal of the national health policy is to eliminate lymphatic filariasis from India by 2015. Despite many national programmes aimed at eliminating filariasis, hardly success is achieved in this area. So, present study is done to know the factors affecting course of disease and morbidity of lymphatic filariasis.

OBJECTIVE: To show the relationship between socio-demographic factors of study patients with lymphatic filariasis and their morbidity profile.

METHODOLOGY: The study is a cross sectional study on filariasis patients residing at rural field practising area of KMC Warangal, Wardhannapet. Sample size of 53 cases was attained during a period of 3 months. All cases of filariasis with visible lymphodema, >10 yrs of age and those who had given a written consent to participate in the study. Predesigned pretested semistructured questionnaire was used & pilot study was done prior to the study. Study Analysis was done Using Micro Soft Excel 2007, Spss 17th (Trail) Version and appropriate statistical analysis was done.

RESULTS AND CONCLUSION: Majority of the study population are illiterate older adult males belonging to very low socio economic status living in poor sanitary conditions, increased chances of breeding in mosquitoes (76%) and study population with no protection against mosquito bite (28%) are found. Filariasis disease showed chronicity with stage-II lymphoedema of lower limbs, recurrent fever and secondary infections causing decrease in daily activity in study population.

INTRODUCTION

Lymphatic Filariasis is a parasitic infection that can result in an altered lymphatic system and the abnormal enlargement of body parts, causing pain and social stigma. It's one of the most disabling of all diseases (WHO) 6. Lymphatic Filariasis is one of the six eradicable diseases in the world Currently 1.23 billion people in 58 countries are living in areas where risk of filariasis is present, of which 40 million are disfigured and incapacitated by the disease⁹. Approximately 80% of these people are living in the 10 countries only, which includes India also¹⁰.

The goal of the national health policy is to eliminate lymphatic filariasis from India by 2015. Despite many national programmes aimed at eliminating filariasis, hardly success is achieved in this area. In India 21 states and their 256 districts were found to be highly prevalent, this includes Telangana and Andhra Pradesh⁷. 47,000 people who are suffering from lymphatic Filariasis in telangana⁸.

AIM AND OBJECTIVES

To show the relationship between socio-demographic factors with lymphatic filariasis among study population.
To show the morbidity profile among the study population

METHODOLOGY

The study is a cross sectional study on filariasis patients residing at rural field practising area of KMC Warangal, Wardhannapet. Sample size of 53 cases was obtained during a period of 3 months from September to November 2017, and this was by convenience sampling that is sample size includes all patients present on the days of visit. Study Analysis was done Using Micro Soft Excel 2007, Spss 17th (Trail) Version. Predesigned pretested semistructured questionnaire was used & pilot study was done prior to the study. Permission to conduct the research was taken from DMHO office and ethical committee of KMC.

Inclusion criteria: all cases of filariasis with visible lymphodema, >10 yrs of age and those who had given a written consent to participate in the study.

Exclusion criteria: cases of filariasis with lymphodema, filariasis cases <10yr, not willing to participate.

Results:

TABLE .1:-Table showing Socio demographic factors of study population

Age		N=53(%)
	10-30 years	1(1.9%)
	31-50years	20(37.7%)
	50-70years	31(58.5%)
	70 above	1(1.9%)
SEX	Male	34(64.2%)
	Female	19(35.8%)
EDUCATION LEVEL¹¹	illiterate	37(69.8 %)
	primary school	10(18.9 %)
	secondary school	5(9.4 %)
	Higher secondary	1(1.9 %)
SOCIO ECONOMIC STATUS*	Class V	31(58.5%)
	Class IV	14(26.4%)
	Class III	8(15.1%)

*According to B.G. Prasad classification

Most of the present study population are 50 -70 years of age group (58.5%), males (64.2%), illiterates (69.8%), and belongs to class V or lower (58.5%) according to B.G. Prasad socio economic status classification.

TABLE .2:-TABLE SHOWING HOUSING AND SANITARY CONDITIONS

		Frequency
TYPE OF HOUSE	KACHA	1 (1.9%)
	SEMI PUCCA	25(50.9%)
	PUCCA	27(47.25%)
SLEEPING HABIT	INDOOR	38(71.7%)
	OUTDOOR	15(28.3%)
SANITATION	ABSENT SANITARY FACILITY WITH VENT PIPE	45(84.9%)
	ABSENT PROPER DRAINAGE SYSTEM	45(84.9%)
	STAGNATION OF WATER	18(34%)
	MOSQUITO BREEDING PLACES	13(24.5%)
BREEDING PLACES	OPEN DITCHES	33(62.3%)
	ILL MAINTAINED DRAINS	14(26.4%)
	OPEN SEPTIC TANKS	6(11.3%)
MOSQUITO PROTECTION MEASUREMES	PROTECTION (71.7%)	
	COIL	28(52.8%)
	LIQUID	13.2(13.2%)
	BEDNET	3(5.7%)
	NO PROTECTION	15(28.3%)

Table 2 shows Majority of the study population (50.9%) living in semi pucca house, and significant number of them sleep outside the house (28.3%). Nearly 85% of the population not having any proper drainage system. Open ditches were widely seen (62.3%) around the houses. Even though most of them (71.7%) are using protection against mosquito bites but significant (28.3%) percent of them use no protection at all.

FIG .1:- Duration of morbidity among study population in relation with age

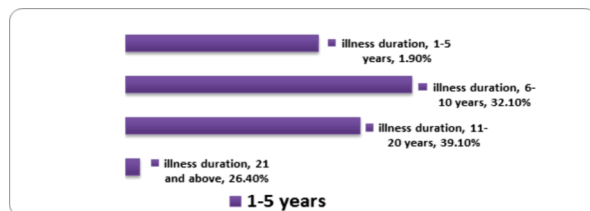


TABLE.3 Morbidity pattern and treatment level among study population

	VARIABLES	
SIGNS AND SYMPTOMS	Predominant part affected is lower limb	49(92.5%)
	Painingroin(lymphadenopathy)	19(35.8%)
	Recent increase in swelling	37(69.8%)
	Recurrent fever	38(71.7%)
	Secondary infections signs	39(73.6%)
	Decrease in activity	39(73.6%)
TREATMENT	Home based	33(62.3%)
	Hospital based	20(37.7%)
COMPLICATION	Lymphoedema	35(66%)
	Elephantiasis	6(11.3%)
	Hydrocoele	7(13.2%)
	Breast involvement	5(9.4%)
LYMPHOEDEMA	Lymphoedema stages- I	3(6%)
	Lymphoedema stages- II	34(64%)
	Lymphoedema stages- III	10(19%)
	Lymphoedema stages- IV	6(11%)

FIG 1 briefs that illness duration is highest amongst 11-20yr age group i.e.,39.10%, next 6-10yrs(32.10%) followed by 21yr and above(26.4%) and least in 1-5yrs(1.5%).

Table 3 describes that most of the patients are having lymphoedema of lower limb(92.5%) with symptoms like secondary infection signs(73.6%), decrease in activity(73.6%),

recurrent fever(71.7%), recent increase in swelling(69.8%), pain in groin(35.8%).

Most of the patients (62.3%) are receiving home based treatment only. Lymphoedema is the major complication seen in 66% with stage –II predominance (64%).

DISCUSSION

Patients of age group of 50 to 70 yrs were more (58.5%) in the present study, which is supported by Basavaraj K et al3 close to 61% were above 56 years.

In the present study, males outnumbered the females (64.2%) and that was supported by a review article Sabesan S et al4 where it states that infection is 10% more in male than females. But in a study done in Karnataka by Basavaraj K et al3 shows female predominance (66.3%).

Most of the cases in the present study are illiterates (69.8%) and belongs to class V lower socio economic status .It is supported by study of Ashok mishra et al2 where 35(49%) were illiterates, and in a study done by Muthineni et al5 low socioeconomic status has been associated with Filariasis infection.

Majority of the study population (50.9%) living in semi pucca house followed by pucca (47.25%),but contadictoryresults were seen in Ashok mishra et al2 .

Majority of the present study population don't have proper drainage facility (84.9%),this was supported by a study done in Kenya Mwobobia IK et al1 where it states that Non-availability of latrines and lack of permanent roofing (tiles or corrugated iron sheets) for the main dwellings in 80% and 95% households in the filariasis prevalent area.

Only 28.3% of them used no protection against mosquito bites in the present study, this finding is not supported by study of Ashok mishra et al2 where only 23.07% of them only use protection against mosquito bites,and in Mwobobia IK et al1 86% of the households had no form of protection against mosquito bites.

Least common compliant in the present study is pain in groin (35.8%),whereas it is the most common symptom 69 out of 78 (88.4%)in a study of Ashok mishra et al2.

Around 64% of study cases had stage –II Grading of lymphoedema, this was not supported by a study of by Basavaraj K et al3 showed that 52.2% had grade I staging.

CONCLUSION

Among all the fiariasis cases studied majority belong to low socioeconomic status,have poor drainage system,hence increased chance of mosquito breeding,the situation is worsened when inspite of national programme active in the area awareness of people for their health is poor enough,as greater fraction of people do not use any protection against the mosquitoes. Greater awareness campaigns ,regular uninterrupted supply of LLINS and drugs ,also insecticidal spray to be done regularly.apart from this permanent removal of breeding sources by landfill and other engineering methods can be of great use.

Filariasis disease course revealed chronicity (>5 years 98%), with stage II (64) % lymphoedema in all such conditions adequate no of rehabilitation centres and occupational therapy to these patients can be of great valuess.

Conflict of interest: No conflict of interest.

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