

Socio-Cultural Habits Among Tea Garden Population of Assam in Relation to Filariasis Transmission

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ABSTRACT Filariasis is endemic but mostly localized among the tea garden workers of Assam. To elucidate the cause of high transmission rate among tea garden labourer; with other parameters the socio-cultural habits were also studied. A total of 281 families belonging to three tea gardens of Upper Assam were interviewed to know the demographic characteristics, social structure, knowledge about the disease and its vector, attitude towards treatment and prevention and willingness to participate in the control measures. Less than 50% heard about the name of filariasis but about 73.7% believe that it is some kind of disease. Only 45.5% recognize the role of mosquitoes in transmission and 28.5% and 15.7% believe hydrocele and elephantiasis occur due to filariasis, respectively. Only 39.5% know that mosquito breed in stagnant water, 43% expects that only their employer or Government is responsible for decreasing the mosquito breeding source. Results of the study indicate that there is a big gap in the knowledge towards filariasis and its transmission. The attitude and practice toward reducing man mosquito contact needs more emphasis and health education. Effort to enhance community participation and personal involvement also needs to be increased.

INTRODUCTION

Despite increased awareness among the scientific community about the significance of social and behavioural influences upon various aspects of filariasis there has been a relative lack of research which has been specifically attempted to correlate the impact of such factors in human disease. Human behaviour, socio-demographic factors, and their perception about filariasis along with its transmission has intimate relation to epidemiology (Chandrasekharan, 1979; Evans, 1993; Eberhard, 1996). Behaviour and attitude to prevent vector breeding, reduce man mosquito contact and compliance to therapy are integral part of filariasis control programme.

Filariasis in Assam is mostly limited to the tea garden population (Dutta, 1996). Though there

are comparatively better health service network along with regular sanitation facilities in the Tea gardens than the rural areas of Assam and the employees are residing in employer provided accommodation; yet the prevalence of this mosquito borne preventable disease is more in them. This has prompted us to take up a comprehensive study on filariasis in the tea gardens of Assam. This report highlights the socio-cultural along with knowledge, attitude and behavioural aspects of the population in respect of Filariasis.

MATERIAL AND METHODS

Study Area and Subjects : Three tea gardens of upper Assam were selected at random for this survey. Among them microfilaraemia were ranging 6 to 11% with 1.8 to 2.7% chronic filariasis cases. Tea garden labourers migrated from Central and South India, to Assam more than 50-70 years ago. They are by and large maintaining the socio-cultural behaviour and a separate entity from the neighbouring indigenous population.

Methods : Pre designed and tested proformae were used to assess their knowledge, attitude, practice and behaviour by trained person along with an educated man from their community who is well conversant with the language and other social matters. Besides interviewing the senior most person of the family in details, other available members were also interviewed. A total of 281 families having 1793 members were covered in the study.

RESULTS

Socio-economically most of them are poor (Income below 1500 pm per family). Educationally 43.2% are illiterate and only 1% are graduate.

Out of the persons interviewed 34.6% completed primary education. more than half (56.2%) did not hear about filariasis and majority (82.9%) did not know the cause of the disease. Only 17.1% of them believe that it is caused by germ and a similar number believe filariasis is caused by intake of bad water. One fourth (24.9%) of the people believe that, it is caused by influence of bad air. Interestingly 45.5% know that filariasis is spread by mosquitoes, but only 21% believe that mosquito spread filaria from men and 32.4% are of the opinion that mosquito spread it from animals. Though about half of them told that filariasis is spread by mosquito but among them only 27% know that mosquito breeds in water. Of course in

Only 48.4% of the families use mosquito net at night and 14.5% people either work at night or sleep outdoor (Table 2).

DISCUSSION

Filariasis in Assam is by and large limited only to the tea gardens, though the indigenous neighbours are also living in the same ecosystem (RMRC unpublished data). Hence the study was carried out to elucidate the social and behavioural factors responsible for filariasis in this community and their knowledge, attitude and practice in relation to mosquito borne diseases. Though as many as 58.4% recognize the symptoms of

Table 1 : Awareness of the community about filariasis

Perception about		Aetiology	
Filariasis		Mosquito Spread Filaria from	
Some Kind of Disease	207 (73.7)	Germ -	48 (17.1)
		Influence of Omen -	7 (2.5)
Causes disability -	151 (53.7)	Bad air-	70 (24.9)
Cause no disability -	56 (20.0)	Intake of bad water -	48 (17.1)
Do not know -	74 (26.3)	Intake of bad food-	25 (8.9)
		Do not know -	83 (29.5)
Symptoms		Mosquito Spread Filaria from	
Big limb-	80 (28.5)	Men -	61 (21.7)
Big scrotum-	44 (15.7)	Animals-	91 (32.3)
Fever -	40 (14.2)	Air -	53 (18.9)
Do not know -	117 (41.6)	Water -	53 (18.9)
		Don not know -	23 (8.2)

Values given in parenthesis are percentages

Table 2 : Knowledge, attitude and behaviour in relation to vectors of filariasis

Knowledge about mosquito breeding	Responsible for breeding source reduction	Reduction of man mosquito contact
Mosquito breeds in		Do not Use Bed Net
Water-111 (39.5)	Individual - 90 (32.0)	Sleep outdoor-12 (4.2)
Soil -28 (10.0)	Community - 62 (22.1)	Work at night - 29 (10.3)
Air -9 (3.2)	Govt. agency - 31 (11.0)	Non use habit-35 (12.5)
Jungle-104 (37.0)	Employer - 90 (32.0)	Use Bed Net
Don't know- 29 (10.3)		Occasionally - 19 (6.8)
		Few member use-50 (17.8)
		Always use - 136 (48.4)

Values given in parenthesis are percentages

general 39.5% believes that mosquitoes breed in water, 37.0% of the opinion that they breed in jungle and 10% believe that mosquitoes breed in soil (Table 1 and 2).

filariasis in their own way, yet knowledge about etiology and the role of mosquito in the spread of filariasis is poor. This may be due to the poor literacy rate and lack of proper health education.

There is an well established health network in all the tea gardens for curative and preventive services yet from the study it appears that it needs further initiative to increase awareness in this community.

Behaviour relating to prevention of man mosquito contact is also poor. Only 48.4% use mosquito net throughout the year. It has been suggested that modification of behavioural factors (Eberhard, 1996) with personal and community efforts to decrease mosquito breeding will bring down the mosquito density and transmission rate.

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