## Awareness of Rickettsial Infections (Typhus Fever) in a High Endemic Community in Hambantota District, Sri Lanka

## M.L.S. Ashani<sup>1</sup>, T.A.G.N. Chandrasena<sup>2</sup>, P.A.G.N. Gunathilaka<sup>3</sup>, B.A.H.R. Premaratna<sup>4</sup>

Rickettsial infections are re-emerging in Sri Lanka with an average annual incidence of 1500 patients. Low awareness and the scarcity of proper diagnostic tools has resulted in delayed disease diagnosis and negligence towards the disease leading to extended morbidity in Sri Lanka. Community awareness of the disease is important for timely diagnosis and control. Hambantota district in Southern Province of Sri Lanka, which records the fourth highest incidence of typhus, was selected for the study.

Households (n= 204) situated around index cases of typhus fevers were randomly selected for the survey. An interviewer-administered questionnaire was used to gather data on illness awareness (disease aetiology, symptoms, transmission, disease associations) by selecting a consenting representative from each household. Descriptive and inferential analysis of the data was carried out using SPSS IBM statistical software.

Of the 204 interviewed, only one (0.5%) identified the illness as "typhus". Majority identified the disease as "Peacock fever" (43.12%; n=88) followed by "tick fever" (14.71%; n=30). It is interesting to note that 41.67% (n=85) of the households were not aware of the disease even though they are living in a disease endemic area. None were aware of the etiological agents of typhus fever. Among those with awareness, 65.55% (n=78), believed that infection was tick-borne and the vector ticks were harbored by peacocks. About 27.73% (n=33) believed that the transmission was directly from peacocks, followed by other birds (2.52%; n=3). Majority 82.35%, (n=98) were unaware of symptomatology while only 1.77%, (n=14) recognized it only as a febrile illness and myalgia (4.20%; n=5). Of those who were aware, 73.95%, (n=88) had received information through acquaintances, 25.21% (n=30) from health personnel and one through mass media. None were aware of preventive measures. The results of the present study highlight the lack of proper awareness of the disease condition, which may adversely impact on disease control efforts.

Keywords: Typhus; Rickettsia; disease awareness, vectors

<sup>&</sup>lt;sup>1</sup> Department of Medicine, University of Kelaniya, Ragama, Sri Lanka, *mlsashani1@gmail.com* 

<sup>&</sup>lt;sup>2</sup> Department of Parasitology, University of Kelaniya, Ragama, Sri Lanka

<sup>&</sup>lt;sup>3</sup> Department of Parasitology, University of Kelaniya, Ragama, Sri Lanka

<sup>&</sup>lt;sup>4</sup> Department of Medicine, University of Kelaniya, Ragama, Sri Lanka