

KNOWLEDGE ON DENGUE FEVER AMONG UNDERGRADUATES OF UNIVERSITY OF SRI JAYEWARDENEPURA

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Keywords: *Knowledge, Dengue Fever, Undergraduates*

Introduction

Dengue is a mosquito-borne infection that in recent decades has become a major international public health concern. Dengue is found in tropical and sub tropical regions around the world. It is predominantly found in urban and semi urban areas (World Health Organization, 2009). Dengue fever is a viral disease transmitted to humans through the bites of infective female *Aedes* mosquitoes, usually by *Aedes aegypti* (Centers for Disease Control and Prevention, 2007). Dengue spread fast in urban areas when the mosquito population increases during rainy season (Epidemiological Unit, Ministry of Healthcare and Nutrition, 2009).

The incidence of dengue has increased dramatically around the world in recent decades. Some 2.5 billion people of the world's population are now at risk from dengue. WHO currently estimates that there may be 50 million dengue infections worldwide every year.(World Health Organization, 2009). The year 2009, reported the largest number of dengue fever cases and deaths in the recent past to the Epidemiological Unit, Sri Lanka. During the year 2011, 21540 cases and 151 deaths were reported up to the date 4th of November 2011 to the Epidemiology Unit, Sri Lanka (Epidemiological Unit, Ministry of Healthcare and Nutrition, 2011). Hence, this present study was carried out with the objectives to assess the knowledge on Dengue fever among undergraduates, to identify the factors associated with knowledge on Dengue fever among undergraduates and to identify the sources of knowledge on Dengue fever among undergraduates.

Methodology

A cross sectional study was undertaken to assess the knowledge on Dengue fever among undergraduates of University of Sri Jayewardenepura. Purposive sampling method was used to select 200 undergraduates. Twenty five (25) undergraduates from each batch from each faculty (Faculty of Medical Sciences, Faculty of Applied Sciences, Faculty of Management Studies & Commerce and Faculty of Arts) were recruited. Equal number of males and females were selected from each faculty. Self administered questionnaire was used to collect data from respondents. The questions were directed toward gaining information regarding undergraduates' knowledge on Dengue fever, sources of information on dengue fever and socio-demographic characteristics of the subjects. Knowledge was assessed by using a scoring system. Data were analyzed by using SPSS software program.

Discussion and Conclusion

Table: 1 Distribution of the respondents according to socio-demographic characteristics (N=200).

Characteristics	Number (N)	Percentage
Faculty		
Medical Sciences	50	25.0
Arts	50	25.0
Management Studies & Commerce	50	25.0
Applied Sciences	50	25.0
Age (years)		
21 – 23	131	65.5
24 – 26	69	34.5
Year of Study		
Second	100	50.0
Third	100	50.0
Sex		
Male	100	50.0
Female	100	50.0
Home Area		
Urban	34	17.0
Semi Urban	61	30.5
Rural	105	52.5

When home area is considered majority were from rural areas.

Table: 2 Level of knowledge on dengue fever (N=200)

Level of Knowledge	Number (N)	Percentage
Poor (0 – 12)	0	0.0
Satisfactory (13 – 24)	39	19.5
Good (25 – 36)	161	80.5
Total	200	100.0

Minimum:17 Maximum:35 Mean: 27.7 Standard Deviation: 3.68

There were no respondents with poor knowledge and majority of respondents had good knowledge. Knowledge scores ranged from zero to 36. Minimum score obtained by respondents was 17.

Overall knowledge on dengue according to the faculty of study

When comparing the faculties with regard to the overall knowledge on Dengue fever all other faculties were combined against Faculty of Medical Sciences. Both faculty groups had very high proportions of respondents with good overall knowledge but Faculty of Medical Sciences had statistically significant higher proportion of respondents with good overall knowledge.

Overall knowledge on Dengue fever among undergraduates was good. Nobody with poor knowledge was identified. This may be because Dengue in Sri Lanka is an endemic disease and almost everybody especially educated persons such as university undergraduates. Media, community, government organizations conduct awareness programmes on Dengue frequently. Therefore people may expose to those programmes and absorb knowledge on dengue frequently.

Table: 3 Overall knowledge on dengue fever according to faculty groups (Medical Sciences and others) of undergraduates

Knowledge	Faculty				Total	
	Medical Sciences		Others		N	(%)
	N	(%)	N	(%)		
Satisfactory	2	(4.0)	37	(24.7)	39	(19.5)
Good	48	(96.0)	113	(75.3)	161	(80.5)
Total	50	(100.0)	150	(100.0)	200	(100.0)

$$\chi^2 = 10.203, \quad df = 1, \quad p = 0.001$$

There is a slight overall knowledge variation present between Faculty of Medical Sciences and other faculty group. This may be due to Faculty of Medical Sciences students gain more knowledge from lecture modules on Dengue they are taught. And also they have the opportunity to learn from hospitalized patients when they attend to clinical practice.

Sex, year of study, home area and history of Dengue fever all turned out to be not associated with the knowledge.

Overall knowledge on Dengue fever among undergraduates was good. But statistically significant association found between Faculty of Medical Sciences and other faculty group ($p = 0.001$). Consequently, this increased knowledge will in turn might bring further benefits to the society and this highly beneficial knowledge will continue over time.

Even the knowledge on Dengue fever among undergraduates were good, educational strategies should implement for non medical related students to enhance the knowledge which deficient such as treatments, symptoms, vaccine etc. are recommended.

References

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