

Knowledge, attitude and perception of Ebola Virus Disease among educated youths: a study from Nepal



Shrestha B

Correspondence to:

birat_2007shrestha@yahoo.co.in

¹*Birat Shrestha*, Health care service provider, SMC, Galkopakha, Kathmandu, Nepal.

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Abstract

Background

Ebola virus disease (EVD), is a rare and deadly acute viral illness. Transmission of Ebola virus occurs through blood contact, secretions, or by infected wild animals such as chimpanzees, gorillas, fruit bats, and monkeys. There are several non-specific symptoms after the Ebola infection, which includes muscle pain, headache, sudden onset of fever, intense weakness, sore throat etc. The present study aimed at understanding the knowledge, attitudes and practices of the educated youths and exploring their perceptions on EVD.

Methods

A standard questionnaire was constructed regarding the Knowledge, attitude and perception towards Ebola virus infection. 300 questionnaires were distributed and among the participants; 240 completed correctly and returned to the investigator.

Results

Majority of the study population (58.34%) was in the age group of 25-28years. Males were comparatively more (53.33%) than females. Hindu was the most common religion (75.83%) followed by Buddhists (20.83%). 22-24 years are more aware about Mode of spread of infection, signs and symptoms and preventive measures. Males have more knowledge for mode of spread, symptoms and signs, preventive measures 75%, 53.9% and 43.75% respectively. Amongst Hindu population knowledge score was almost 50%, followed by Buddhists.

Conclusion

The present recommended the promotion and sustainability of health messages focusing on the mode of transmission and preventive measures. Awareness programme is strongly needed for the better knowledge about the disease.

Key words

Ebola virus, health, Nepal, transmission, youth



Background

Ebola virus disease (EVD), is a rare and deadly acute viral illness. Transmission of Ebola virus occurs through blood contact, secretions, or by infected wild animals such as chimpanzees, gorillas, fruit bats, and monkeys. Afterwards Ebola transmission occurs through human-to-human direct contact with the blood, any bodily secretions or fluids, vomit, saliva, sweat, mother's breast milk, organs of infected people through the objects (like needles and syringes), and with surfaces and materials contaminated with these fluids [1].

Infections may also occur when health staff or patients relatives are unfortunately exposed them when taking care without proper protection. Another most important risk factor is contact with infected corpses (human or animal) [2]. The most deadly aspect of EVD is it causes severe and often fatal illness in humans where fatality rate is very high i.e. 90% without proper medical treatment. First Ebola outbreak was reported in 1976, in Yambuku, Democratic Republic of Congo. The village is situated near the Ebola River, so the disease was named after it and in Nzara, Sudan [1, 3].

There are several non-specific symptoms after the Ebola infection, which includes muscle pain, headache, sudden onset of fever, intense weakness, sore throat etc. In advanced stage, complications like vomiting, diarrhoea, and impaired kidney and liver function with resultant end organ damage is inevitable. Ebola virus, a member of the family of Filoviridae. The Filoviruses are thread-like RNA viruses.

The incubation period of Ebola virus is 2–21 days. Recorded numbers of people (approximately 11,295) died in the three West African countries [4].

Ebola is a great concern for public health and a significant risk factor by immigration for the unaffected countries. Some vital factors such as lack of knowledge, lack of proper preventive measures, poor health infrastructure are important for disease outbreak [5]. Survey on EVD regarding the knowledge, practice, attitude provide a baseline data for further assessments and help in strengthening the behavioral and communication interventions on the EVD response.

The present study aimed at understanding the knowledge, attitudes and practices of the educated youths and exploring their perceptions on EVD in Kathmandu valley.

Material and Methods

Study Period

This study was conducted in Dec. 2015.

Study design, participants

300 questionnaires were distributed amongst educated youths of Kathmandu valley. All participants were graduates form science, arts and commerce stream with an age range between 22 - 28 years. Study investigator collected data after completion of the questionnaire.

Response Rate

Response rate of this study was 80%. Among the 300 questionnaire distributed, 240 were completed correctly and returned to the investigator.

Questionnaire design

A standard questionnaire was constructed regarding the knowledge, attitude and perception towards Ebola virus infection. Unique Study identification number was used to maintain the confidentiality of the study. Questionnaire was validated by in terms of chronbach's alpha value 0.7.

Inclusion criteria

All educated youths willing to participate voluntarily in this study were included in this study

Exclusion criteria

Persons, those who were not willing to participate, absent or incomplete questionnaires were excluded from the study.

Data management and statistical analysis

Data analysis and interpretation was done by SPSS 16.

Results

Majority of the study population (58.34%) was in the age group of 25-28 years. Males were comparatively more (53.33%) than females. Hindu was the most common religion (75.83%) followed by Buddhists (20.83%). Christian and Muslim population were few (Table 1).

Table - 1 sociodemographic characteristics of the study population

Age group in years	n(%)
22-24	100(41.66)
25-28	140(58.34)
Gender	
Female	112 (46.66)
Male	128 (53.33)
Religion	
Hindu	182(75.83)
Muslim	3(1.25)
Buddhist	50 (20.83)
Christian	5 (2.08)

Table 2 depicts that mode of spread of infection was known to both the age groups but 22-24 years are more aware about it. Regarding signs and symptoms and preventive



measures 22-24 years group showed more knowledge comparing the older age group. Males have more knowledge for mode of spread, symptoms and signs, preventive measures 75%, 53.9% and 43.75% respectively. Amongst Hindu population knowledge score was almost 50%, followed by Buddhists. Amongst Christians knowledge score for spread of disease was 60%.

Table - 2 Association between socio-demographic characteristics and knowledge score of respondents on EVD n(%)

	Mode of spread	Symptoms and	Preventive measures
Age group (years)			
22-24	80(80)	51(51)	43(43)
25-28	97(69.28)	64(45.71)	50(35.71)
Gender			
Female	81(72.32)	46(41.07)	37(30.27)
Male	96(75)	69(53.90)	56(43.75)
Religion			
Hindu	90(49.45)	92(50.54)	67(52.34)
Muslim	1(33.33)	1(33.33)	0(0)
Buddhist	23(46)	20(40)	24(48)
Christian	3(60)	2(40)	2(40)

Discussion

It is evident from this research survey that almost half of the population is aware to some extent for EVD attacks. In this study, it was found out that respondents who were in the 22-24 years age group graduates, more knowledgeable comparing with another groups and mortality especially during outbreaks. Still more awareness is required. Ebola is deadly disease which spreads within a short time, so it is very important to have a good knowledge about the disease among the youngsters. There are earlier works supports this study [6].

As infections may also occur when health staff or patients relatives are unfortunately exposed them when taking care without proper protection, so special attention is required in this context. The most deadly aspect of EVD is it causes severe and often fatal illness in humans where fatality rate is very high i.e. 90% without proper medical treatment. Nepal is well known tourist spot and Kathmandu valley is famous worldwide for the scenic beauty. Each day several international flights are landing from different parts of the globe. So there is high chance of spreading infections. So this study corroborates with other studies where awareness and knowledge was significantly needed. It was also observed that females had relatively less knowledge compared with males. It may be due to lack of interest to spend time on current affairs or any other reason [7].

Conclusion

The present recommended the promotion and sustainability of health messages focusing on the mode of transmission and preventive measures. Awareness programme is strongly needed for the better knowledge about the disease.

Abbreviations

Ebola virus disease (EVD).

Competing interests

None declared.

Authors' contribution

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