ORIGINAL ARTICLE

Assessment of Knowledge of Male Animal Handlers Regarding Congo Hemorrhagic Fever

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ABSTRACT

Aim: To assess knowledge of male animal handlers regarding Congo Hemorrhagic fever.
Study Design: Descriptive cross-sectional.
Place and duration of study: The study was conducted at UC-5 of Larkana city, February 1st to 29th 2016.
Methods: This was a descriptive cross sectional study conducted on 200 adult male (Age 18 to 60 years) animal handlers, i.e. Milk Men, Butchers, Veterinarians, Livestock farmers, Skin processors, of urban area of Larkana city. They were selected by convenient random sampling technique and were from similar socio economic situation. The data collection tool comprised of semi structured questionnaire filled by researcher himself to gather data regarding knowledge of CCHF; 40 people in each category were interviewed. The complete data were entered and analyzed into computer with SPSS version 22. Percentages, and frequencies were examined.
Results: All 200 subjects were divided in to five groups; 40 people in each category assessed regarding their knowledge. Milk Men 95%, Butchers 80%, Veterinarians 55%, Livestock farmers 50%, Skin processors 75%, of urban area of Larkana city. This study exposed that knowledge of CCHF among male animal handlers, collectively were71%.
Conclusion: The study established that knowledge of CCHF among male animal handlers was excellent. Furthermore research culture be created in deprived areas of Pakistan in male animal handlers to reveal more information that many lives can be saved as a wave of mortalities during the religious obligation among Muslims during Eid-ul-Azha.
Keywords: Crimean Congo hemorrhagic fever, Knowledge, Male animal handlers.

INTRODUCTION

Crimean Congo hemorrhagic fever is triggered by infection with a tick borne virus. The disease was first characterized in the Crimea in 1944 and given the name Crimean hemorrhagic fever. It was then later documented in 1969 as the cause of illness in the Congo, therefore resulting in the current name of the disease. Crimean Congo hemorrhagic fever is originate in Eastern Europe, particularly in the former Soviet Union, during the Mediterranean, in northwestern China, central Asia, southern Europe, Africa, the Middle East, and the Indian subcontinent[1]. Crimean Congo hemorrhagic fever occurs furthermostcommonlyamongst agricultural workers following the bite of an infected tick and to a smallermagnitude among slaughter house workers exposed to the blood and tissues of infected livestock and medical workers through contact with the body fluids of infected patients[2]. The virus is communicated to humans by infected ticks, direct contact with fresh meat or blood of viremic animals commonly domestic livestock, or direct contact with the blood or secretions of an infected human[3,4].

Butchers were more likely to have CCHF antibody than people with other job groups. Increasing human contact to infected animals raises the danger of infection. Livestock handlers, skin processors, veterinary personnel, livestock market employees and other personnel engaged in jobs requiring some contact with animals and or animal products are at high risk. A report from Pakistan revealed that most infections were pragmatic among people employed in the business of keeping and slaughtering of livestock[5,6]. In Pakistan, 69 cases were confirmed in 2012 up till November and there

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were 183 confirmed cases between 2011 and 2013. During last four years, 35 deaths were declared due to Crimean Congo Hemorrhagic Fever[7,8].

Contacts between the living things living together are inevitable. While it is essential to provide related benefit in interspecies relation for the stability of life, once the balance is impaired the life is endangered reciprocally. Zoonotic diseases are the most conspicuous example which transmitted between animals and persons in a natural way (bacteria, parasite, fungi and virus). Woolhouse et al. noted that more than 700 human pathogens were considered zoonotic[9]. Zoonotic infections constitute 70% of the community acquired infections[10]. In the development of these diseases, the socio cultural habits and socio economic status have important effects. Poor countries are affected more from communicable and infectious diseases of which most are zoonotic and that the effects are more destructive[11,12,13]. Zoonotic diseases dangerous to animal health are not merelysignificant because of the economic losses affecting the meat, milk and wool products but also because of their effects on food security[14]. In the training of farmers regarding the zoonotic diseases the influence of the physician is emphasized[15]. A study in Colombia confirmed that education led to developmental changes among farmers, thus, allowing them to decrease occupational risks[16].

The objective of the study was to assess the knowledge, among male animal handlers regarding Congo Hemorrhagic fever.

MATERIAL AND METHODS

It was a descriptive cross-sectional conducted among male animal handlers in UC-5 of Larkana City.
The study was conducted from, February 1st to 29th 2016. All the male animal handlers in UC-5 of Larkana City. Convenient Random Sampling technique was used to select the study population.
Inclusion Criteria: All adult male (Age 18 to 60 years) animal handlers,i.e. Milk Men, Butchers, Veterinarians, Livestock farmers, Skin processors.
Exclusion Criteria: All those patients suffering from zoonotic diseases, i.e. Brucellosis, Tick Typhus.
Sample Size: Calculated sample size was 200.
Data collection procedure: The researcher himself visited UC-5 of Larkana City. Knowledge regarding CCHF among male animal handlers was taken from on a pre tested questionnaire.
Data Analysis: The complete data were entered and analyzed into computer with SPSS version 22. Percentage, and frequencies were examined as descriptive statistics.

RESULTS

All 200 subjects were divided in to five groups; 40 people in each category assessedregarding their Knowledge.

Knowledge about Congo Hemorrhagic fever (n = 200)

Category	Response	
	Yes	No
Milk Men	38 (95%)	02 (5%)
Butchers	32 (80%)	8 (20%)
Livestock Farmers	20 (50%)	20 (50%)
Veterinarians	22 (55%)	18 (45%)
Skin Processors	30 (75%)	10 (25%)

Table concluded that 142(71%) study subjects were aware about Congo Hemorrhagic fever among and 58(29%) were not aware about Congo Hemorrhagic fever.

DISCUSSION

This study revealed that knowledge about Congo Hemorrhagic fever among study subjects were determined as (71%) were aware and (29%) were not aware. The asset of this study is that it is the first study conducted in Larkana city, of Sindh Province.A study carried out among farmers in Turkey discovered nearest (67%) results as current study that 71% of subjects were knowledgeabout Congo Hemorrhagic fever as fatal diseases[15] in a study conducted in Kenya, it was reported that there were no differencesamong both genders regarding the knowledge for a zoonotic disease analyzed[16].

In another study that conducted in Nairobi,informed that creating indication based communications and collaborating them to the public via press/ broadcast channels might be effective in minimizing the zoonotic disease knowledge as a risk[6].

Kersting et al, stressed that the physicians are accountable for updating but it was not sufficient by itself and the healthcare providers, veterinarians and public health employees should provide farmers educative facility in this subject[10].

In the findings of the study, it was determined that the knowledge level of the farmers in zoonotic diseases was appropriate. Nyangaga et al. disclosed that they provided a change in practice with the awareness training and brought healthy exercise models[17].

CONCLUSION

This study is premeditated to evaluate the knowledge of the subjects regarding zoonotic diseases in Larkana city of Sindh Province where agriculture and

livestock are commonly practiced. This was a preliminary study to determine the knowledge of the subjects in regards to the CCHF as zoonotic diseaseappearsignificant levels.

SUGGESTIONS

Underneath the direction of the conclusions to be obtained from this study, it is proposed to provide a zoonotic diseases training for the animal handlers in the region. In our country, within the prospectof Ministry of Health, such units should be established to fight against zoonotic diseases and consequently providing training about the concern may deliver beneficial effects and also systematic education curricula.

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