

Food Poisoning (Salmonellosis) as a Public Health Problem Through Consuming the Meat and Eggs of the Carrier Birds

Authors : M.Younus, M. Athar Khan, Asif Adrees

Abstract : The present research endeavour was made to investigate the Public Health impact of Salmonellosis through consuming the meat and eggs of the carrier's birds and to see the prevalence of Salmonella enteritidis and Salmonella typhimurium from poultry feed, poultry meat, and poultry eggs and their role in the chain of transmission of salmonellae to human beings and causing food poisoning. The ultimate objective was to generate data to improve the quality of poultry products and human health awareness. Salmonellosis is one of the most wide spread food borne zoonoses in all the continents of the world. The etiological agents Salmonella enteritidis and Salmonella typhimurium not only produce the disease but during the convalescent phase (after the recovery of disease) remain carriers for indefinite period of time. The carrier state was not only the source of spread of disease with in the poultry but also caused typhoid fever in humans. The chain of transmission started from poultry feed to poultry meat and ultimately to humans as dead end hosts. In this experiment a total number of 200 samples of human stool and blood were collected randomly (100 samples of human stool and 100 samples of human blood) of 100 patients suspected from food poisoning patients from different hospitals of Lahore area for the identification of Salmonella enteritidis and Salmonella typhimurium through PCR method in order to see the public health impact of Salmonellosis through consuming the meat and eggs of the carrier birds. On the average 14 and 10 stool samples were found positive against Salmonella enteritidis and Salmonella typhimurium from each of the 25 patients from each hospital respectively in case of suspected food poisoning patients. Similarly on an average 5% and 6% blood samples were found positive from 25 patients of each hospital respectively. There was a significant difference ($P < 0.05$) in the sero positivity of stool and blood samples of suspected food poisoning patients as far as Salmonella enteritidis and Salmonella typhimurium was concerned. However there was no significant difference ($P < 0.05$) between the hospitals.

Keywords : salmonella, zoonosis, food, transmission, eggs

Conference Title : ICVBS 2015 : International Conference on Veterinary and Biomedical Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : February 16-17, 2015