



Dr Samarendra Kumar Basu

MBBS, DGO, FIMAMS (GO) FELLOW (IAOG),
Consultant, Senior Gynaecologist and Obstetrician,
Trained in Infertility Management, Laparoscopist
Hony Editor, Journal of IMA (JIMA)

Editorial



Dr Sibabrata Banerjee

MBBS, MD,
Consultant Physician,
Fortis Hospital, Kolkata
Guest Editor, Journal of IMA (JIMA)

Zoonosis in Modern Medicine

In recent medical science, Zoonosis is attracting a lot of medical and social interest. One of the most recent Zoonosis outbreak is in Kerala from bat by NIPAH virus. Apart from that salmonellosis, shigellosis, rabies etc. are of important medical interest.

Zoonosis is an animal disease that is transmissible to human. Humans are usually an accidental host, that acquire disease through close contact with an infected animal who may or may not be symptomatic.

Childrens are at highest risk for infection, because of they are more likely to be infected by pets. Immunocompromised patients are having very high case fatality rate.

Transmission of an extensive array of bacterial, viral, parasitic zoonotic pathogen including drug resistant organism can occur from pets. Many different routes of transmission can cause infection related to pets including infectious saliva, hand to mouth transfer, insect bite, aerosol from body fluid, scratches and contamination of water or environment with pathogen containing animal soil.

Zoonosis from dogs and cats are very well studied. Rabies, pasturella, capnocytophaga, brucella, salmonella, campylobacter, giardiasis, toxocara, echinococcus, lymes disease are well known dog related zoonosis. Bartonella, pasturella, tularemia, cow pox, salmonella, toxocara cani etc.. are known cat related zoonosis. Horses, rabbits, deers, sheeps, cattles, goats, rodents, birds, reptiles are known for zoonotic infection. Interestingly handling aquarium fishes very rarely cause any zoonotic infection until consumed as food.

NIPAH VIRUS infection is very well discussed in media but it is not a new disease. In last two decade, around 600 patients died from this disease in different continents. India and Bangladesh are the worst sufferers. Another virus very close to Nipah virus is HENDRA VIRUS. Hendra virus is transmitted from horse to men directly. Nipah virus is transmitted usually from fruit bat to human via pigs and intermediate host.

Although pets has been implicated in transmission of zoonosis to their owners, risk of transmission from contact with pets is low and may be further reduced by simple precautions like proper hand wash, proper veterinarian care of pets, prohibition of food in animal area, proper sharing of information regarding disease risk and prevention with attenties.

Vaccination is a further promise for immunisation against zoonotic infection. Tetanus immunoglobulin and tetanus toxoid is almost mandatory to every animal bite patients.

Links to society and government sponsored guideline for important information are "HEALTHY PETS, HEALTHY PEOPLE" and "SOCIETY GUIDELINE LINKS ; RABIES".

Pets serve valuable role in society. Pets may lower blood pressure, reduce dyslipidemia, improve feeling of loneliness with increasing opportunities for exercise, outdoor activities and socialization. Zoonotic risk from pets, particularly for immunocompromised patients are almost preventable and a challenge to modern medicine.

Disclaimer

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publisher. Publication does not constitute endorsement by the journal.

JIMA assumes no responsibility for the authenticity or reliability of any product, equipment, gadget or any claim by medical establishments/institutions/manufacturers or any training programme in the form of advertisements appearing in JIMA and also does not endorse or give any guarantee to such products or training programme or promote any such thing or claims made so after.

— *Hony Editor*