



BIOSECURITY KNOWLEDGE AND PRACTICES REGARDING ZOO NOTIC DISEASES IN VETERINARY MEDICINE STUDENTS.

VII CISP VET - Congresso Iberoamericano de Saúde Pública Veterinária, 7ª edição, de 15/09/2025 a 16/09/2025
ISBN dos Anais: 978-65-5465-155-4

MARRUFO; María Fidelia Cárdenas¹, SOSA; Nayely Pech², COELLO; Matilde Jiménez³, PACHECO; Antonio Ortega⁴, LARA; Gaspar Fernando Peniche⁵, OSORIO; Carlos Enrique Pérez⁶

RESUMO

Biosecurity knowledge and practices regarding zoonotic diseases in veterinary medicine students

Introduction. Zoonoses are diseases transmitted between animals and humans. They are caused by bacteria, viruses, parasites, and other pathogens that can cause subclinical infections or diseases that range from mild to severe, even fatal. Zoonotic diseases such as rabies, brucellosis, and leptospirosis represent a significant threat to human and animal health worldwide; approximately 75% of emerging diseases have an animal origin. Veterinary medicine students are at risk of contracting zoonotic diseases during their academic training due to their work experience with different animal species and in diverse settings such as laboratories, necropsy and dissection rooms, farms, and university hospitals. These settings increase exposure to infectious agents to varying degrees, which under certain circumstances can affect their health. Personal protection and biosafety measures influence the prevention of zoonoses and occupational accidents. **Objective.** This study aimed to determine the seroprevalence of *Leptospira* spp. and evaluate knowledge about zoonotic diseases and biosecurity practices among veterinary medicine students in Mérida, Yucatán, Mexico. **Methods:** A cross-sectional study was conducted with informed consent. 166 veterinary medicine students participated. Serum samples were analyzed for leptospirosis using microagglutination (MAT) to estimate prevalence and infecting serovar. An electronic questionnaire was administered to explore knowledge of zoonotic diseases, occupational hazards, and biosafety practices. **Results:** A *Leptospira* seroprevalence of 27% was found, and the most frequent serogroup was Australis. Data obtained from the questionnaire identified increased contact and exposure to dog and cat urine. The zoonotic disease most recognized by students was rabies, with 96.4%. 31.9% had a high level of zoonotic disease recognition. 5.4% self-reported having suffered from a zoonotic disease. Deficiencies in the use of biosafety measures and lack of awareness of regulations related to occupational accidents were found. **Conclusions:** The findings of this study highlight the seroprevalence of anti-leptospiral antibodies in veterinary students. It is urgent to improve and strengthen training in biosafety and occupational risk prevention within veterinary medicine curricula.

PALAVRAS-CHAVE: biosecurity practices, zoonoses, veterinary students, occupational health, leptospira

¹ Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, cmarrufo@correo.uady.mx

² Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, nayely.pech@correo.uady.mx

³ Autonomous University of Yucatán, Dr. Hideyo Noguchi Regional Research Center, mjcoello@correo.uady.mx

⁴ Autonomous University of Yucatán, School of Veterinary Medicine, opacheco@correo.uady.mx

⁵ Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, gaspar.peniche@correo.uady.mx

⁶ Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, carlos.perez@correo.uady.mx

¹ Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, cmarrufo@correo.uady.mx
² Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, nayely.pech@correo.uady.mx
³ Autonomous University of Yucatán, Dr. Hideyo Noguchi Regional Research Center, mjcoello@correo.uady.mx
⁴ Autonomous University of Yucatán, School of Veterinary Medicine, opacheco@correo.uady.mx
⁵ Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, gaspar.peniche@correo.uady.mx
⁶ Autonomous University of Yucatán, School of medicine, Infectious and Parasitic Diseases Laboratory, carlos.perez@correo.uady.mx