Determining the factors affecting the hidden risk of rabies in the case of animal bites in Ardabil province in the years 2016 to 2019

Abstract;

Background: Rabies is considered one of the most critical and dangerous viral zoonotic disorders, widely spread among animals, which can lead to human disease through animal bites. Ardabil province is also one of the regions with the widespread occurrence of biting animals and Rabies. This study investigated and evaluated the factors affecting the increased risk of Hari disease caused by biting insects.

Aims: The present study aimed to determine the influential factors on the hidden risk classes of Rabies in animal bites in Ardabil province from 2017 to 2021. The study was conducted to provide an effective solution and perspective for managing animal bites in Ardabil province based on evidence.

Materials and Methods: Using an analytical-cross-sectional method, the current epidemiological study focused on the continuity of biting insects and Hari disease in Ardabil province. The population included residents of the province during the study years, obtained through a census. Data were collected from the Ardabil University of Medical Sciences portal up to 2021. Mean and standard deviation were used for quantitative data, and simple percentages were used for qualitative data. Using the life cycle assessment criterion, the risk of Hari disease was estimated based on the severity of the incurred damages. The impact of influential

variables on hidden classes was also examined. Additionally, SPSS version 21 was used for data analysis.

Results: Evidence indicates that animal biting incidents during the four-year study period have increased in the Ardabil province region. These incidents, especially among the age group of 5 to 14 years (21%), have occurred more frequently among males than females, with males being more affected by animal attacks (77% vs. 21%). Among these incidents, farmers had the highest probability of encountering animals (19%), and dogs were the primary attackers of humans (84%). The analysis shows that only 0.3% of individuals are at high risk of contracting Hari disease.

Conclusion: Overall, the present results demonstrate an increasing trend in animal bites in Ardabil province. Therefore, a greater emphasis on public health issues and educating individuals about safe behaviors in the face of animals is essential to address this issue effectively.