

Factors affecting the decision of vaccinating dogs in Bobo-Dioulasso, Burkina Faso

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Background

Rabies is a neglected zoonotic disease and transmitted to human through animal bites. Despite the low notification of rabies in Burkina Faso, at least 6,000 exposures to dog's bites and 5 deaths are reported a year. While rabies prevalence is high in dogs (70%) and pet's vaccination legally required, the vaccination coverage remains unsatisfactory for effective disease control.

Objectives

The study aimed to understand the factors that affect the decision of dog's owners to adopt dog vaccination against rabies.

Methods

The study included 239 dog owning households, randomly selected in the district of Bobo Dioulasso, Burkina Faso. Data on dogs and owners were collected through a face to face interview, using a structured questionnaire, with the head of household or any other adult available. The Khi-square was calculated at 95% level of confidence and a variable was considered as significantly linked if $p < 0.05$.

Results

The key findings are shown in Table I and Table II below.

Table I : Characteristics and vaccination status of dogs in households

Characteristics	Observations	Vaccination status (%)			P-value
		Doubtful	Non-vaccinated	Vaccinated	
Sex					
Female	79	8.9	65.8	25.3	0.991
Male	150	8.0	70.0	20.0	
Female + Male	10	10.0	70.0	20.0	
Dog breed					
Exotic	3	0.0	0.0	100.0	0.003
Local	226	8.8	67.7	23.5	
Mixed	10	0.0	40.0	60.0	
Dog origin					
Bought	150	10.3	55.5	34.2	0.002
Gifted	65	5.2	82.8	12.1	
Born in household	10	10.0	80.0	20.0	
Picked on street	14	0.0	92.9	7.1	
Propose of dog's owning					
Pet	27	7.4	70.4	22.2	0.243
Guard	162	9.9	60.9	29.2	
Both	50	4.0	78.0	18.0	
Management mode					
Confined	80	10.0	51.2	38.8	0.007
Roaming	100	10.1	71.7	18.2	
Both	59	3.4	74.6	22.0	

Table II : Characteristics of dogs owners and vaccination status of dogs in households

Characteristics	Observations	Vaccination status (%)			P-value
		Doubtful	Non-vaccinated	Vaccinated	
Sex					
Male	124	9.7	66.9	23.4	0.539
Female	115	7.0	64.3	28.7	
Distance between home and vet clinic (km)					
Less than 5	12	8.3	58.3	33.4	0.000
5 to 10	57	6.5	74.7	18.8	
More than 10	170	14.0	40.4	45.6	
Knowledge on rabies					
Unsatisfactory	34	11.8	73.5	14.7	0.000
Satisfactory	151	8.6	74.2	17.2	
Very satisfying	54	5.6	37.0	57.4	
Knowledge on dog vaccination					
Unsatisfactory	112	8.0	83.1	8.9	0.000
Satisfactory	69	7.2	65.2	27.6	
Very satisfying	58	10.3	32.8	56.9	
Perceived price of dog vaccination					
Affordable	72	8.3	54.2	37.5	0.025
Expensive	167	8.4	70.6	21.0	



Réalisation : Yaro Daffinnou, VSF-B, Burkina Faso, 2018

Conclusion

The findings revealed the factors that significantly affect the adoption of vaccination by dog owners. The success of rabies control strategy needs that local community rationale and thoughts be well understood to establish adapted policies and strategies.

