

FELINE-HUMAN ZOONOSES TRANSMISSION IN NORTH AFRICA: A SYSTEMATIC REVIEW

INTRODUCTION

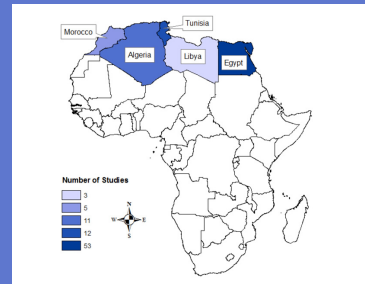
Throughout human history, domestic animal species have represented a unique zoonotic disease risk for the transmission of pathogens ranging from viral, bacterial, parasitic, and fungal. Zoonoses are infectious diseases that spread between animals and humans. In North Africa, cats have a particularly long record and occupy a specialized niche within many communities.

This systematic review was conducted to analyze the current and historical literature documenting the breadth and variety of zoonoses in North Africa, specifically relating to the domesticated feline.



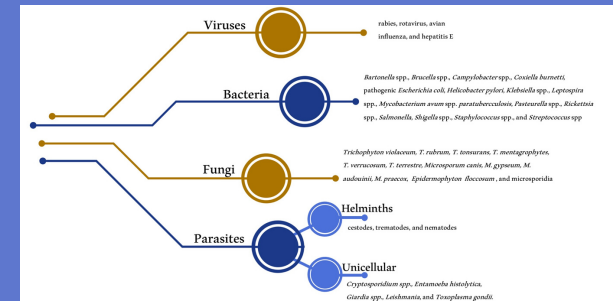
RESULTS

In total, 76 articles were selected for the review, ranging in publication dates from 1939 to 2019 and included a case study, cross-sectional surveys, genomic analyses, and a book chapter. The most commonly studied pathogen was *Toxoplasma gondii* (n=17) followed by various helminths (n=10).



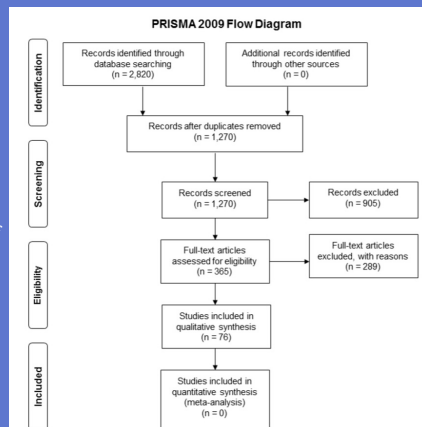
DISCUSSION

- Vaccination, prompt veterinary and medical care of zoonoses is essential in limiting the disease burden in North African communities.
- Programs aimed at reducing the number of feral and stray populations which can harbor many zoonotic pathogens
- The gap between the expected and actual roles of human and animal health care providers has allowed for a vacuity in zoonotic disease education and prevention
- Public health messages surrounding safe animal contact and steps to take to protect people and animals from zoonotic exposure risks should come from both human and animal healthcare using a collaborative voice



METHODS

Multiple (22) electronic databases were searched on January 16, 2019 for published reports on feline zoonoses in North Africa. Key words and search terms were developed from larger categories for the host, routes of zoonotic exposure, and location of interest. There were no date restrictions but publications were limited to English or French due to language abilities of the reviewers. The countries of Algeria, Egypt, Libya, Morocco, and Tunisia were selected based on the World Bank's classification of countries that comprise their Middle East and North Africa region.



CONCLUSION

Zoonotic diseases shared between humans and felines have been, and continue to be, a public health threat that should be addressed with education and intervention strategies which take into consideration the welfare of both species. This review has outlined several of the zoonotic feline pathogen risks that have been studied in the countries of Algeria, Egypt, Libya, Morocco, and Tunisia as well as their most significant findings. Yet despite the published data over the past several decades, many questions still exist on the role of felines in the spread of disease within North Africa. More research in this area is needed to create effective and comprehensive interventions for the protection of residents of this region and their feline counterparts.

REFERENCES

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