



Short Communication

knowledge of students of public schools about responsible ownership of pets and zoonoses

Conhecimento de discentes de escolas públicas sobre guarda responsável de animais de estimação e zoonoses

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ABSTRACT

The objective of this study was to evaluate the knowledge of public school students of Teresina (PI, Brazil) about Responsible Pet Guard and some Zoonoses. The research was conducted through questionnaires, and their analysis revealed that most students have a pet and know what is responsible ownership. However, the most do not know what zoonosis is. Television was the main source of information, therefore it is suggested that this means of communication be used more intensively to disseminate responsible ownership, animal welfare and Zoonoses. Most students reported that the topic Zoonoses was never addressed in school, demonstrating that the subject should be more discussed. Vaccination is the best known practice of Responsible ownership. The deworming is practiced by 51.82% of the interviewees and castration was cited by 30.36%. Most students reported that that pets only have access to the street accompanied, but 32.05% have stated that their pet has access to the street. This conduct can lead to traffic accidents, injuries from fights with other dogs, bites of people, spread of zoonoses and other problems. Nearly half of the students claimed that their family had abandoned a pet, mainly because of financial difficulties to treat diseases presented by the animal. The main Zoonosis recognized by the students was rabies. Approximately 80% do not recognize Visceral Leishmaniasis and toxoplasmosis as Zoonoses. It was concluded that public school students of Teresina have little knowledge about the Responsible ownership and on Zoonoses.

RESUMO

O objetivo deste estudo foi avaliar o conhecimento de estudantes de escolas públicas de Teresina (PI, Brasil) sobre a Guarda Responsável de cães e gatos e algumas Zoonoses. A pesquisa foi realizada por meio de questionários, e sua análise revelou que a maioria dos alunos tem um animal de estimação e sabe o que é a Guarda Responsável. No entanto, a maioria não sabe o que é Zoonose. A televisão foi a principal fonte de informação, por isso sugere-se que este meio de comunicação seja usado de forma mais intensiva para disseminar a Guarda Responsável, o Bem-estar Animal e as Zoonoses. A maioria dos estudantes relatou que o tema Zoonoses nunca foi abordado na escola, demonstrando que o assunto deveria ser mais discutido. A vacinação é a prática mais conhecida da Guarda Responsável. A desparasitação é praticada por 51,82% dos entrevistados e a castração foi citada por 30,36%. A maioria dos estudantes relatou que os animais de estimação só têm acesso à rua acompanhados, mas 32,05% afirmaram que seu animal de estimação tem acesso à rua. Essa conduta pode levar a acidentes de trânsito, lesões por brigas com outros cães, mordidas de pessoas, disseminação de Zoonoses e outros problemas. Quase metade

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dos estudantes alegou que sua família havia abandonado um animal de estimação, principalmente por dificuldades financeiras no tratamento de doenças apresentadas pelo animal. A principal Zoonose reconhecida pelos estudantes foi a Raiva. Aproximadamente 80% não reconhecem a Leishmaniose Visceral e a Toxoplasmose como Zoonoses. Concluiu-se que os estudantes de escolas públicas de Teresina possuem pouco conhecimento sobre a Guarda Responsável e sobre Zoonoses.

INTRODUCTION

The abandonment of dogs and cats is common in Brazil, making them vulnerable to mistreatment. They can also become sources of Zoonoses, with serious risks to public health (KAY et al., 2017).

Teresina (capital of the State of Piauí in Brazil) has a high prevalence and incidence of Visceral Leishmaniasis (DRUMOND; COSTA, 2011). Therefore, educational measures are needed, especially among children and adolescents (COSTA, CAVALCANTI, LINS FILHO, 2017).

This study was carried out to assess the level of knowledge of public school students from Teresina about some Zoonoses and Responsible Ownership of Pets.

MATERIAL AND METHODS

Two public elementary and secondary schools were randomly selected from each of the four regions of the city of Teresina, and 1,680 students were interviewed.

Questionnaires with objective questions were used. Questions were asked on Responsible Pet Ownership and notions regarding some Zoonoses. The statistical analysis was descriptive with percentage frequencies. The project was approved by a Brazil platform (protocol 524,706; 01/29/2014).

RESULTS AND DISCUSSION

Among the 1,680 students in the study, 1,538 (91.55%) had pets (dog or cat). Most students (54.05%; 908/1,680) knew what Responsible Ownership is, with television as the main source of information. More than half the surveyed students (51.25%; 861/1,680) did not know what Zoonoses are, and those who did (48.75%; 819/1,680), had television as the main source of this information (34.54%; 283/819). Hence, television was the primary source of information on Responsible Pet Ownership and Zoonoses. This means of communication has a great reach in the Brazilian population (RIBEIRO, 2018). Therefore, it is suggested that professionals and institutions that work with responsible property, animal welfare and zoonoses use television more intensely and more frequently.

Zoonoses were never discussed in the schools, as reported by 745 students (44.35%; 745/1,680). These findings demonstrated that Zoonoses should be more discussed in schools, enabling a decrease in the incidence of these diseases in the country.

Vaccination is the best known practice of Responsible Ownership (98.80%; 1,666/1,680). It is essential for animal health (DAY et al., 2016) and is an important practice in Responsible Ownership. This result is probably because Teresina offers anti-rabies vaccination free of charge. However, Rabies is still reported in Brazil, especially in the Northeast, which has the highest number of cases of canine Rabies (WADA; ROCHA; MAIA-ELKHOURY, 2011; SOARES et al., 2016). Teresina, where the research was conducted, is a city in Northeast Brazil.

Vaccination is very important to control the disease, but not always adopted by the Brazilian population, even being free of charge (TEIXEIRA; DREHMER, 2017). According to 44.35% (745/1,680) of the students, Zoonoses were never discussed in the schools. This factor contributed to the occurrence of the disease in Brazil, which registered an average of 16 cases of human rabies every year from 2000 to 2009 (WADA; ROCHA; MAIA-ELKHOURY, 2011), including 110 deaths in 2011 (SILVA NETO; RODRIGUES; CARVALHO, 2012). Another fact related to the fact that the schools do not address the zoonoses theme was demonstrated by the fact that 51.25% (861/1,680) of the students do not know what Zoonosis is.

Castration was recognized as one of the responsible ownership by 510 (30.36%), students, therefore most students did not identify castration as a part of Responsible Ownership. Castration is still unusual in Teresina (SILVA et al., 2017), which could mainly be due to the lack of awareness, cultural resistance, and financial difficulties of the owners (SILVA et al., 2009). The municipal health managers have not yet been sensitized to the issue and do not conduct free castration of stray animals to control Zoonoses, unlike the cities with successful castration campaigns (FERREIRA; FERREIRA, 2016). The existence of uncastrated abandoned animals can cause overpopulation, accidents, cruelty to animals, and spread of Zoonoses, posing serious risk to public health (KAY et al., 2017).

Deworming was practiced by 51.82% (797/1,538) of the students, demonstrating that this practice requires more attention because Zoonoses caused by the intestinal parasites of dogs are an ongoing problem in Public Health, making the deworming of dogs and cats one of the indispensable practices in Brazilian cities (TORRES; OTRANTO, 2014). The pets of 67.43% (1,037/1,538) of the students only had access to streets accompanied with someone, but 493 (32.05%) students stated that their animal had independent access to streets. So, more

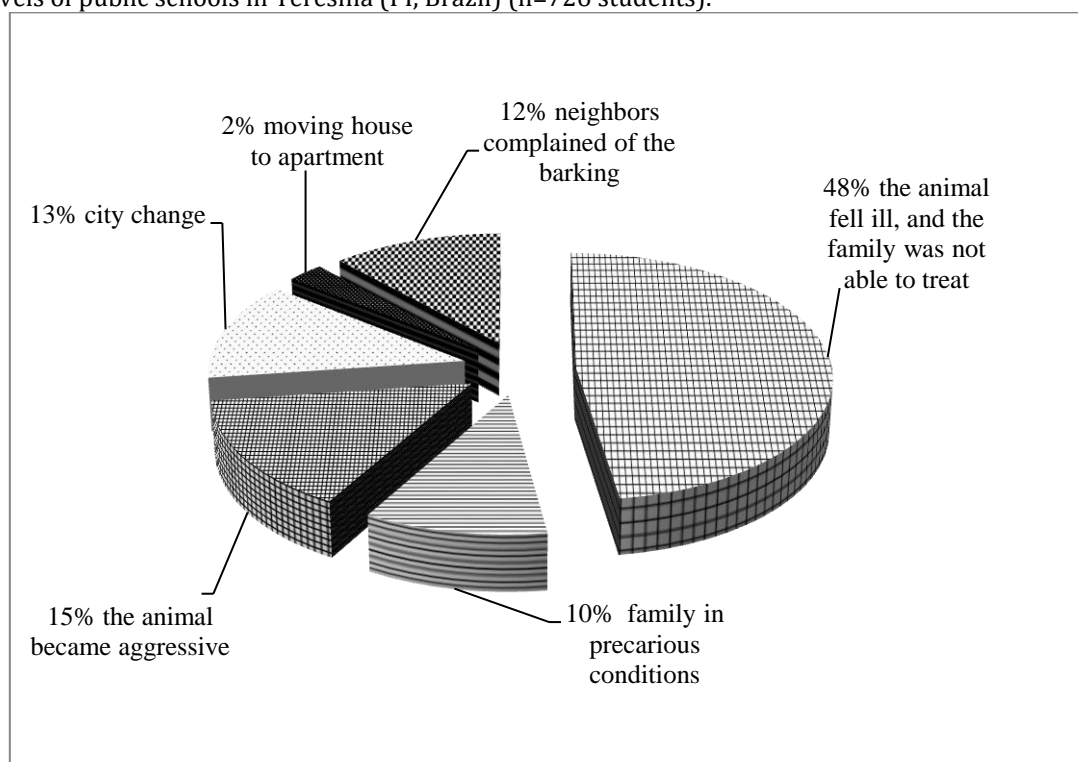
than 30% of the animals have access to streets freely, which can lead to the running over of the animals, traffic accidents, injuries by fighting with other dogs, and biting of people, and the animals could get affected by bacterial, parasitic, and sexually transmitted diseases and suffer unwanted pregnancy (PAIXÃO; MACHADO, 2015; KAY et al., 2017).

As already detected in Brazil, 43.21% (726/1,680) students reported that their family had abandoned an animal, and the main reason for this was the emergence of a disease that the family could not treat (Figure 1).

Thus, almost half of the students (43.21%) stated that his family had abandoned a pet, a fact already detected in Brazil (PAIXÃO; MACHADO, 2015).

To deal with this situation, non-governmental institutions and managers should principally invest in raising awareness among the youth and children. Interventions through permanent educational measures enable critical thinking in individuals, allowing changes in attitude, collectively promoting animal welfare (COSTA, CAVALCANTI, LINS FILHO, 2017).

Figure 1 - Reasons for the abandonment of pets, according to questionnaire applied to students of primary and secondary levels of public schools in Teresina (PI, Brazil) (n=726 students).



The principal Zoonosis recognized by the students was rabies (34.41%; 578/1,680) (Table 1). Biting or licking by the animals was cited as the main source of transmission, with 50.61% (850/1,680) of the students

considering dogs as the main transmitter. However, cats play a major role in transmitting rabies in urban Brazil, including a growth trend in its epidemiology (RODRIGUES et al., 2017).

Table 1 - Knowledge about some zoonoses in students of the elementary and secondary public schools of Teresina (PI, Brazil) (n = 1.680 students).

	Rabies	Visceral leishmaniasis	Toxoplasmosis
Recognized as zoonose	34.41% (578)	18.28% (307)	17.32% (291)
Not recognized as zoonose	65.59% (1,102)	81.72% (1,373)	82.8% (1,389)

Visceral leishmaniasis (LV) is an important zoonosis, especially in the city where the research was conducted (DRUMOND; COSTA, 2011). Regarding Visceral Leishmaniasis, 81.72% (1,373/1,680) of students were unaware of the disease, 67.89% (1,156/1,680) did not know how to prevent the disease, and 63.12% (1,060/1,680) did not know the mode of transmission. The data suggests that it is difficult to control this

endemic disease in the city (MOURA; MONTE; SOUSA, 2015).

Toxoplasmosis was known to 17.32% (291/1,580) of the students (Table 1), and the mode of transmission was unknown to 62.32% (1,046/1,680). It was observed that over 80% of students did not know what Toxoplasmosis is, although there are reports of human cases in Teresina (CARVALHO et al., 2015). In addition, dogs were

identified as carriers in the city (LOPES et al., 2011). Health managers should invest in educational campaigns to reduce the incidence of Toxoplasmosis.

CONCLUSION

It was concluded that students from public schools in Teresina-PI know little about Responsible Pet Ownership and Zoonoses. This finding should serve as a warning to city managers to develop campaigns to reduce the abandonment of animals and progression of Zoonoses.

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