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OPINION ARTICLE

PETS IN HOSPITALS: BENEFITS AND RISKS

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ABSTRACT

This paper argues the risks of the humanization programs in hospitals which allow visits by pets. The issue of hospital-acquired infections and the risks posed by the introduction of parasites, including viruses, bacteria and helminths, is here discussed. We highlight the difficulties inherent to the implementation of guidelines to prevent infections in the nosocomial environment

KEY WORDS: Hospitals; infections; humanization; pets.

In 1961 a manual of statistics applied to medicine (Domenech, 1961) proposed a number of questions addressed to the reader. One of those questions dealt with the problem of *Domestic animals, therapeutic benefits. (La Vanguardia, Barcelona* 24/6/79).

This is the subject of the present article (Allen et al., 2002).

A report on 92 patients in a hospital ward who had suffered a myocardial infarction, described the outcome for the patients who kept, and those who did not keep pets at home:

	With animals	Without animals
Dead	*3 (6%)*	*11 (28%)*
Survived	*50 (94%)*	*28 (72%)*
TOTAL	53	39

The Question was: how to explain the role of pets in relation to this outcome?

A possible explanation was suggested: *Cohabitation with an animal requires that one should care for it, walking it regularly, daily, which engenders healthy physical conditioning, favorable to cardiac patients*.

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But this is proved inadmissible because:

1. [...] *random variables, domestic animals and mortality. Patient samples with and without domestic animal were not randomly selected […] and there is no grounds to speak of a cause-effect relationship*.

2. *This clever explanation is invalidated by the fact that only a few of the patients had dogs, when the explanation would be aceptable; the others had cats, canaries, budgies, hamsters and even lizards…*

Measuring happiness and stress is problematic (Robertson et al., 1990). Human and animal psychologists adopt distinct scales to measure satisfaction, grief and loss, as in J.E. Cooper's *Life Stress Inventory* and Sheldon Cohen's *Perceived Stress Scale*. For the owners of cats and dogs, the *Lexington Attachment to Pets Scale (LAPS)* is perhaps the most widely used instrument to assess human emotional attachment to pets and is suitable for both dog and cat owners. (Robertson et al., 1990; Butjosa et al., 2017). The problem with these scales lies in the real significance of both *happiness* and *stress* for distinct individuals, and for everyone, in particular situations. Moods vary with external and internal factors. Loss of a job may be bad or good, according to the person's dissatisfaction or contentment with his job. The same with relatives, depending on how close they are and on the good or bad kind of relationship maintained at the time (Arnold et al., 2012).

The idea that patients in a hospital setting could benefit from the visit of their favorite pets became widespread. (Cooper, 1976; Allen et al., 2002; Hosey et al., 2018; Mayo Clinic Staff, 2020). In fact, there is no reliable evidence that it has been satisfactorily proved.

Elsworthy (2019), shows that a recent survey found that: *over a third of people prefer their pets to their partner*; Turner et al. (2003) and Güdücüoğlu (et al., 2015) raise the question of moods influenced by spouses and cats, while Yngelmo (2018) reports a study that shows that *dog owners take more pictures of their dogs than of their spouses*, while Fam (2019) suggests that *you're better at choosing a pet than a spouse*.

Although a growing number of hospitals around the world adopted *humanization* programs that include visits to patients by their pets, this practice must be viewed with caution (Scheidt & Carvalho, 2006; Ghasemzadeh & Namazi, 2015; Nierenberg, 2017; Christian et al., 2018; Elsworthy, 2019; Lobetti, 2020; Murthy et al., 2020; Weber et al 2020).

One of the most serious and everlasting problems facing hospital wards are hospital-acquired infections. (Ducel et al., 2002, Jayshree & Pittard, 2005; Martin, 2012; Güdücüoğlu, 2015; Khan et al., 2015; Boev & Kiss, 2016).

Every hospital has a series of guidelines to minimize the spread of hospital-acquired infections (Ducel et al., 2002, Silveira et al., 2011). Frequent washing of hands is one of them - frequently disregarded by attendants, including doctors and nurses in maternity wards (Pidot et al., 2018; Scheidt & Carvalho, 2006). Control of pests, insects, rats and other carriers of viruses

and bacteria is a long term, complex, and often difficult objective to be attained (Kappel et al 2013, Martin, 2012). Control of visitors arriving directly from the street bringing flowers and fruit present a daily challenge. Xavier (2021) advises visitors in hospital wards to follow a number of rules in order to avoid introducing pathogens and contaminants, even without the burden of having to deal with animals on the premises (Güdücüoğlu; 2015; Gillespie, 2017; Simonato et al., 2020).

A growing literature deals with sanitary measures to prevent the introduction of pathogens and their vectors by pets (Silveira et al., 2011; Ghasemzadeh, 2015; Mandrá et al., 2019; López-Cespero, 2020). Hospitals that offer a special room for visiting pets - a kind of mini-zoo - are better equipped than those that allow pets to be brought into private rooms, not to speak of communal wards. Transit of animals in elevators, and corridors outside patient rooms must be viewed with extra-care. Also barking is a disruptive noise for those who need or just want a quiet environment. Feces and urine must be expected in areas supposed to be frequently hygienized.

Addressing pet owners, a rich literature highlights the risks that pets may pose to their owners at home, and in particular, in hospital wards. Cooper (1976) advises on the species to be allowed in hospitals. Just imagine a visiting Bernese mountain dog, a Pit bull terrier, or a hairy Afghan hound being brought to a patient wing.

Many serious studies warned that *apparently healthy animals participating in Animal-Assisted Interventions (AAI) have the potential to asymptomatically carry and even transmit zoonotic pathogens to people*. Lopez-Cespero, (2020) who reviewed the current literature on the subject concludes that *However, despite this interest, the literature does not provide unanimous support for including dogs, horses, cats, or other animals in intervention facilities*. Mandrá (2019) presents a recent review of the literature on this same subject. There is a general agreement that special attention must be paid to the introduction of internal pathogens in the microbiome and external symbionts (Simonato et al., 2020; García-Fonticoba et al., 2020; Boyle et al., 2019; Borland et al., 2020). Reviewing the literature on medical risks and on hospital policies offering a series of recommendations regarding the management of animals in healthcare, Murthy et al. (2020) suggest a set of rules of guidance and warn that *the role of animals in the transmission of zoonotic pathogens and cross-transmission of human pathogens in these settings remains poorly studied*. In another paper, David, Murthy et al (2020) show that because *Scientific studies addressing the potential risks of animal to human transmission of pathogens in the healthcare setting are limited in number and, because animals have generally been excluded from hospitals, the experience gained to date has been mainly from case reports and outbreak investigations*. Lobetti (2007) and Alves (2020), for instance, argue the case of the viral diseases of dogs.

I am aware that this is a touchy subject that must be further analysed, not only in a short opinion article, but also by interested members of the public, sociologists, psychologists and in particular, by parasitologists and infectologists, due to the risks involved in this practice.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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