History of the Cat Domestication and the Benefits of Having a Pet

The evolution and elaboration of agriculture in the Middle East around 11,000 years ago, and the associated expansion in cultivation and storage of grains, such as barley and wheat, attracted the unwanted attention of small rodents, the natural prey of wildcats. Attracted by this increase in the local small rodent population, Neolithic towns and villages were invaded by wildcats who gradually settled there.

The human inhabitants there allowed these wildcats to live around their rodent infested homes and granaries seeing the benefits. This process, in turn, gave rise to urban domestic cat populations that became more relied on humans for shelter and food (Faure and Kitchener 2009, Leyhausen 1988, Malek 1993). Thus, the original domestic cat was a product of natural selection whereas adaptation in other barnyard animals and dogs to human dominion was largely driven by artificial selection (Carlos et al. 2009).

At some point, animals went from being utilitarian companions to “pets”, although it is not clear what the crossover involves (Lawrence 2003, Rollin and Rollin 2003). Studies have suggested that both human and animal companions are benefited in many ways by the relationship between them (Bernstein 2007). The relationship between human health and pet ownership has been studied from various perspectives, and there is evidence suggests that pets provide companionship and also probably provide psychological and physiological health benefits (Katcher 1981, Katcher and Friedmann 1982, Friedmann 1995, Headey 2003, McNicholas et al. 2005).

Research shows that companion animals can physically and psychologically benefit their owners in many ways such as: they have been shown to lower blood pressure, decrease heart rate, helps overcome stressful situations, reduce depression and feelings of loneliness and improve self-esteem, and seemingly do so in diverse contexts (Siegel 1990, Lookabaugh and Triebenbacher 1998, Vormbrock and Grossberg 1998).

The risk rates for cardiovascular disease are significantly lower for both current and past cat owners than for non-cat owners (Qureshi et al. 2009). Pet owners are reported to use fewer medications, visit their doctor less often, and have lower blood pressure and cholesterol levels than non-pet owners (Headey et al 1999). It is generally believed that pets provide mental and physical health benefits to their human companions (Olmert 2009).

Several studies have found that owning and/or interacting with a pet has benefits for the individual, including mental health outcomes such as reduced anxiety and physical health outcomes such as improved physical activity and immune response (Gershman et al. 1994, Kaye et al. 2007, Baltimore et al. 2006, Chang et al. 1997, Takkouche et al. 2008). Older pet owners undertake fewer annual health care visits and spend fewer days in an acute care setting if hospitalized compared to none of the pet owners (Headey 2003, Siegel 1990).

In older adults, animals also provide a sense of comfort and social support (Krause-Parello 2008). Research also shows that pets have an important role in enhancing children's

development (Brodie 1981, Katcher and Friedmann 1982, Endenburg and Baarda 1995) and in the well-being of the elderly (Brodie 1981, Katcher and Friedmann 1982, Endenburg and Baarda 1995). In a therapeutic setting, pets can also be used (Burch and others 1995, Endenburg and Baarda 1995, Hart 1995).

While animals offer significant benefits to our society, there are well-documented health risks associated with owning a pet (Robertson et al. 2000). Household pets were found to play a direct role in the transmission of zoonosis (Dada et al. 1979). Many helminths infecting humans also occur in other mammals, including domestic cats, who live near humans and eat similar foods (Traversa 2012).

The human animal bond has become stronger in modern society with pets playing a major role as a source of companionship, entertainment, and emotional support for their owners. This close contact, however, can also increase the risk of exposure to infectious diseases, as pets have been involved in the transmission of more than 60 zoonotic agents (Macpherson 2005). Some of these parasites cause diseases which can be serious under specific circumstances (Traversa 2012, Baneth et al. 2016).The increasing number of companion animals, including cats, poses serious problems for public health, veterinary and socioeconomic problems throughout the world (Szwabe and B?aszkowska 2017).

There are a diverse range of infections that can be transmitted to humans from domestic cats, including parasitic, bacterial, fungal, and viral diseases. Without veterinary care, domesticated free roaming cats in many countries can cause problems of public health and animal welfare concerns (Slater 2001). Indeed, the majority of diseases can be controlled or prevented by the cat owners if they are sufficiently knowledgeable and have the resources to do so (Njuguna et al. 2017). Concerns about the public health hazards of pet ownership have recently increased significantly, and while many potentially zoonotic organisms are associated with cats, enteric pathogens are of particular concern (Hill et al. 2000).

The occurrence of feline gastrointestinal parasitism throughout Europe has been investigated by many studies. These pathogens affect from 30.8% to 35.1% of owned cats, as reported in two recent multicenter surveys in Europe (Beugnet et al. 2014, Giannelli et al. 2017). The prevalence estimates vary widely among different countries depending on the parasite species, the study population and the diagnostic procedure used (Giannelli et al. 2017).

It should be emphasized that, according to Millan and Casanova, the infection rate reaches up to 100% for stray cat populations due to inadequate control of parasites and access to intermediate hosts (Millan and Casanova 2009). There is rather limited data on the occurrence of helminth parasites in Southeast Asia (Hinz, 1980, Rajavelu and Raja 1988), which is also true for other endoparasites of cats as well.