Education and debate

Pet ownership and human health: a brief review of evidence and issues

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Research into the association between pet ownership and human health has produced intriguing, although frequently contradictory, results often raising uncertainty as to whether pet ownership is advisable on health grounds.

The question of whether someone should own a pet is never as simple as whether that pet has a measurably beneficial or detrimental effect on the owner’s physical health. The emotional bond between owner and pet can be as intense as that in many human relationships and may confer similar psychological benefits. Death of a pet can cause grief similar to that in human bereavement, whereas threat of loss of a pet may be met with blunt refusal and non-compliance with advice on health.

We examine the current evidence for a link between pet ownership and human health and discuss the importance of understanding the role of pets in people’s lives.

Is pet ownership associated with human health?

Research dating from the 1980s popularised the view that pet ownership could have positive benefits on human health. Benefits ranged from higher survival rates from myocardial infarction; a significantly lower use of general practitioner services (prompting some researchers to speculate on considerable potential savings to health expenditure)2; a reduced risk of asthma and allergic rhinitis in children exposed to pet allergens during the first year of life4; a reduced risk of cardiovascular disease;5 and allergic sensitisation in general.6 No studies have found significant social or economic differences between people who do or do not have pets that would adequately explain differences in health outcome, leading to the belief that pet ownership itself is the primary cause of the reported benefits.

Although the research did much to raise awareness of the importance that people attach to their pets, recent studies have failed to replicate the benefits. A review of the association between pets and allergic sensitisation found inconsistent results for cat ownership between studies of similar design, whereas dog ownership seemed to have no effect or even protected against specific sensitisation to dog allergens and allergic sensitisation in general.7 Other studies on the suboptimal findings that pet ownership is associated with a sense of social integration.8 Similarly, recent research has failed to support earlier findings that pet ownership is associated with a reduced risk of cardiovascular disease,9 a reduced use of general practitioner services,10 or any psychological or physical benefits on health for community dwelling older people.11 Research has, however, pointed to significantly less absenteeism from school through sickness among children who live with pets.12

Do we need a broader definition of health?

The main issue may not be whether pet ownership per se confers measurable physical benefits but the role that pets have in individual people’s lives—namely, the contributions of the pet to quality of life or the costs to wellbeing through a pet’s death. This issue embraces a broader definition of health that encompasses the dimensions of wellbeing (physical and mental) and a sense of social integration.

Three potential mechanisms have been proposed to explain the association between pet ownership and benefits to health (fig 1).13 The first is that there

References w1 to w6 are on bmj.com
is no real association between the two, rather that cofactors such as personality traits, age, and economic or health status impact on the decision to own a pet and thus produce an apparent link between pets and health. So far, however, evidence is lacking that any of these cofactors account for both health promoting attributes and propensity to own pets, suggesting that health benefits, when reported, may be attributable to some aspect of pet ownership.

The second proposal is that pets may enhance social interactions with other people, thus providing an indirect effect on wellbeing. Social contact has been long recognised as beneficial in that it alleviates feelings of loneliness and social isolation. Pets undoubtedly act as "social catalysts," leading to greater social contact between people. These factors may be particularly important for those at risk of social isolation, such as elderly people or people with physical disabilities, who lack many of the opportunities for social interactions of their more able bodied peers.

The third proposal focuses on ways in which pet ownership may exert a direct effect on human health and wellbeing through the nature of the relationship. Close human relationships have a powerful influence on wellbeing by providing emotional support. They may reduce perceptions of stressful events thus protecting against anxiety related illness, may give confidence that successful coping strategies can be found to deal with stress, and may enhance recovery from serious illness such as stroke, myocardial infarction, and cancer. These aspects of a relationship are collectively referred to as social support, or the lack of, seem to constitute a major risk factor for health, rivaling the effects of well established risk factors such as cigarette smoking, blood pressure, blood lipid concentrations, obesity, and lack of physical activity.

The value of companionship

Companionship—a commonly stated reason for pet ownership—is regarded as theoretically distinct from social support in that it does not offer extrinsic support but provides intrinsic satisfactions, such as shared pleasure in recreation, relaxation, and uncensored spontaneity, all of which add to quality of life. Thus companionship may be important in fostering positive mental health on a day to day basis, whereas social support may be of particular value in buffer-
Summary points

- Over 90% of pet owners regard their pet as a valued family member.
- Reluctance to part with a pet may lead to non-compliance with health advice.
- Pets may be of particular value to older people and patients recovering from major illness.

The death of a pet may cause great distress to owners, especially when the pet has associations with a deceased spouse or former lifestyle.

Many people would welcome advice and support to enable them to reconcile or manage pet ownership and health problems whenever possible.

Commentary: Pets—pleasures and problems

Richard Mayon-White

Good health is more than the absence of disease, and the review by McNicholas and colleagues makes a strong argument that the companionship of pets contributes to wellbeing. People decide to keep pets for reasons that go far beyond health, and there are social benefits when animals promote conversation and friendship. The debate about health effects of pet ownership has focused on the major problems of cardiovascular disease, mental health, and allergy. A point to add to the review is that the benefits partly depend on the type of animal. In a prospective study of one year survival after a myocardial infarct, dog owners were more likely to survive than cat owners and people who did not own pets. Although exercise from dog walking might be a factor, the improved survival was related to social support independent of physiological status.

On the fringes of the debate about health and pets are some unusual observations about benefits and hazards of pets. The ability of some dogs to give an early warning of an epileptic fit or a hypoglycaemia attack is