The Human-Animal Bond in Practice: The Good, Bad, and Ugly A Perspective

Since the dawn of mankind, humans have been drawn to animals. And when they learned to use tools what was the first things they did? They drew animals! And not just one or two, but hundreds of paintings, as evidenced by the art of Chauvet Cave and other prehistoric cave art, some 36,000 years ago¹. Since that time, our interaction with animals have become even closer, especially with small companion animals. Some 65-68% of North Americans live with at least 1 pet, meaning today's children are more likely to live with a pet than their biological father or sibling². Add to this that in 2016, Americans spent ~ \$63 billion dollars on pet related purchases³, more than the gross domestic product of 65% of the 211 countries monitored by the United Nations⁴, all which underscores that pets are truly in most of our lives. And, it is our profession of veterinary medicine, that is charged and sworn to care for the health and well-being of these special companions.

What is there about this connection between animals and humans, often called the Human-Animal Bond, that has driven this trend and makes us feel happier and healthier. Overtime, what was once intuitional and anecdotal explanations has become a wealth of evidence-based data to explain the benefits of animals in our lives. So powerful was the data, that in 2013, the American Heart Association published a review of the many cardiopulmonary studies as related to pets and our health and published a statement that "Pet ownership, particularly dog ownership, may be reasonable for reduction in Cardiovascular Disease risk" In these studies they found that positive interaction with animals was often more effective than ace-inhibitors in lowering blood-pressure and that owning a pet seemed to have a stress-reducing effect on cardiac function as well as lessening the potential of fatal cardiac event in previous coronary patients by up to 4 times! Other studies, often with participants in the thousands, found suggestions that positive interactions with animals could reduce secondary co-morbidities such as obesity, hypercholesterol, diabetes and depression.

Other potential benefits to interactions with animals have been reported ⁶: Non-Hodgkin and Large Cell Lymphoma, smoking, and pediatric respiratory diseases have been positively affected by animal interactions as has improve immunity, cellular healing and improved socialization skills in autistic children. Animals have proven to be facilitators of improved community unity and interactions as well as helping to bring some degree of comfort and joy in eldercare and Alzheimer patients.

Neuroendocrinologists have provided additional information, discovering that positive interactions with animals will facilitate increases in β -endorphins, oxytocin, prolactin, β -phenylethylamine and dopamine.

¹ Shipman P. The animal connection and human evolution. CA forum on theory and anthropology, Current Anthropology. 2010, 51:4

² Hodgson,K, Barton,L, Darling, M, Antao,V, Kim, Florence, Monavvari,A: Pet's Impact on Your Patient's Health: Leveraging Benefits and Mitigating Risk. J Am Board Fam Med 2015;28:526-534

³ AmPetProducts Asscn

⁴ United Nations Statistics Division. December 2016.

⁵ Glenn N. Levine, Karen Allen, Lynne T. Braun, et al. on behalf of the American Heart Association Council on Clinical Cardiology and Council on Cardiovascular and Stroke Nursing Circulation. 2013;127:2353-2363 published online before print May 9 2013,

⁶ Takashima G, Day MJ. Setting the One Health Agenda and Human-Companion Animal Bond. Int J.Environ Res. Public Health 2014. 11, 11110-11120;doi: 10.3390/ijerph111111110

These hormones have been associated with blood pressure regulation, analgesia, stress relief, joy, pleasure and bonding behavior⁷, and are key to understanding how the HAB effects its positive health and mental/emotional benefits.

Who has recognized and taken action on these benefits? Sadly, our profession seems to be lagging behind those of some industries such as marketing, (read Subaru videos) http://carmichaellynch.com/subaru-dream-weekend and our colleagues in the human health care arena, where a survey of 1,000 family practitioners⁸ revealed that 97% believe in the health benefits of pet ownership and 60% have recommended a pet to a patient for improved health! And, there are economic benefits, with an estimated \$11.7 billion in US healthcare savings as a result of petownership⁹!

Studies around veterinary practice and the HAB are few but telling. A 2006 study linked the strength of the HAB with veterinary visits, with those considering their pets to be part of the family averaging 3 visits per year, those considering their pet to be a companion, averaged 2.2 visits/year, and those considering their pet to be property, visited $\sim 1.1 \, \text{visits/year}^{10}$. A later study resulted in similar findings, that compliance to recommendations were higher if owner attachment was high 11. The most recent survey of 2,000 pet owners 12 indicated that education about the human-health benefits of pet ownership would influence them to better maintain their pet's health by improving their compliance to preventative maintenance, veterinary visits, better nutrition and even pet insurance purchase. In the study, 77% of millennials, a growing segment of the pet owning public, would visit their veterinarian more often if the health benefits of the HAB were explained to them.

The HAB does have a darker side in our profession. We have all witnessed the highly bonded, or perhaps overly bonded client, so concerned for the welfare of their pet that they forgo diagnostics or treatments for fear of alienating or damaging that bond they share. To this, our profession might be a little more sensitive to these issues by discussing openly and compassionately about the procedures needed and the benefits as well as the risks. We also can address this in how we set up or practice facilities and train our staff and doctors on such communications, attitude and handling techniques. These are partially being addressed by the current Fear Free movement initiated by Dr Marty Becker. Hoarding is another example of misguided bonding and is a complex issue that this presentation cannot adequately address at this time.

Perhaps the darkest side of the HAB has to do with team wellness. Our profession currently is experiencing an epidemic of depression or worse yet, suicides. In a profession already stressful just by the nature of our work, add to this long hours, low pay, debt, and the common trait of compassion and perfectionism; one may not be surprised that 10% of us have major psychological distress and that 1 in 6

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⁷ Odendaal, J.S.J.; Meintjes, R.A. Neurophysiological correlates of affiliative behavior between humans and dogs. Vet. J. 2003, 165, 296–301.

⁸ HABRI-Cohen Research Group, 2015

⁹ Clower TL, Neaves TT. The healthcare cost savings of pet ownership. Prepared for the Human-Animal Bond Research Initiative (HABRI) 2015

¹⁰ Leu TW, Pantenburg DP, Crawford, PM. Impact of the owner-pet and client-veterinarian bond on the care that pets receive. BNResearch. JAVMA, 232/4 2008

¹¹ Maille V, Hoffmann J. Compliance with veterinary prescriptions: the role of physical and social risk revisited. J Bus Research 66/1 2013. Pges 141-144..

¹² HABRI-AAHA Survey. The Cohen Research Group. 2016

veterinarians have considered suicide ¹³. We are not alone in this and share this distinction with first responders who also rush into "rescue" with a culture of "doing it right"

The HAB is truly a bright light that can also burn if we let ourselves get out of balance. As E.O Wilson might say ¹⁴, we are instinctively bound to living things, and perhaps going back to the beauty of life, nature and the joys and pleasures of the HAB and taking time to recharge, perhaps with your own pet or even a pet in your care, can bring you back to center. As Cynthia Krosky wrote ¹⁵, "Love the animals you care enough, to love and believe in yourself. When you do the bond in beautiful thing"

¹³ Prevalence of risk factors for suicide among veterinarians-United States. Centers for Disease Control. 2014

¹⁴ Wilson EO. Biophilia. Cambridge: Harvard University Press. 1984 ISBN 0-674-07442-4.

¹⁵ Krosky, C. Bonding without endangering ourselves. NAVC presentation 2017