

# One health: unique critical care approach for nursing

**Laura Edwards** BA, RVN, TQFE, AFHEA, CertVNECC and **Karin Gerber** RN, BSc, MSc in Advancing Practice, explain this cross-professional strategy which addresses global issues

**The one health approach is a collaborative strategy that considers the health of people, animals and the environment to be interdependent, and aims to improve global health (WHO, 2017).**

It can be applied in both veterinary and human health care to help us address global health issues that affect patients, family members and the planet. The COVID-19 pandemic highlighted the need for a global framework for improved surveillance and a more holistic, integrated system. Gaps in one health knowledge, prevention and an integrated approach were seen as key drivers of the pandemic.

By addressing these gaps between human, animal and our overall environmental health, one health is seen as a transformative approach.

## Why?

One of the first questions we want to address is, why? Why should animal-centred and human-centred

nurses collaborate? Looking at these images, our daily working lives are not so different. Which of these are veterinary centred and which are human centred?

The aim is to do more than talk; the dream is integrated health and welfare research. Why work together? What are the benefits?

Pet owners have high expectations of survival rates in their pets: Corr et al (2024) found that nearly 60 per cent of pet owners believed that their pets should have access to the same diagnostic tests as their owners.

It could also be further argued that due to the astounding work being done in human medicine, pet owners' personal experiences of treatments are informing their choices of treatments of their pets.

Or, is the drive towards more complex veterinary treatments more closely aligned to the increasingly reliant relationship pet owners have with their animals and the decrease in availability of human-centred community social

care? We can see from the Care Quality Commission (2023) data that the increase in demand between 2023 and 2024 for mental health services in England rose by 21 per cent, but the number of interactions with the service only rose 9 per cent. The statistics are worse in children and young people.

The PDSA Animal Wellbeing (PAW) Report (2024) reported that 51 per cent of the UK population own a pet, including 10.6 million pet dogs, 10.8 million pet cats and 800,000 rabbits. If we are to look at the population of humans, that means roughly one in every three humans in the UK owns a pet.

These numbers did not even look at the many other animals that humans decide to share their lives with. Ninety-one per cent of pet owners felt that their pet improved their life, with 88 per cent reporting the pet makes them mentally healthier, and 69 per cent of owners stated their pet improves their physical health. Martins et al (2023) suggested that pet owners may have higher levels of social support, life satisfaction, happiness and mood with lower levels of loneliness than non-pet owners.

## What?

From as far back as the 1970s, research has long pointed towards the positive health benefits of owning a pet (Mencke, 2024). Animal-assisted interventions (AAI) are increasingly used as a complementary therapy in clinical settings. The International Association of Human-Animal Organisations define AAI as "a goal oriented and structured intervention that intentionally includes or incorporates animals in health, education and human services (for example, social work) for the purpose of therapeutic gains in humans" (Jegatheesan et al, 2018).

Westgarth et al (2019) found that people who own dogs are four times more likely to meet current physical activity guidelines than those non-dog owners, and in a study of adults older than 50 years with mildly elevated blood pressure, the presence of a pet dog or cat had a significant impact on blood pressure, with cat ownership being associated with lower diastolic and systolic blood pressure (Surma et al, 2022).

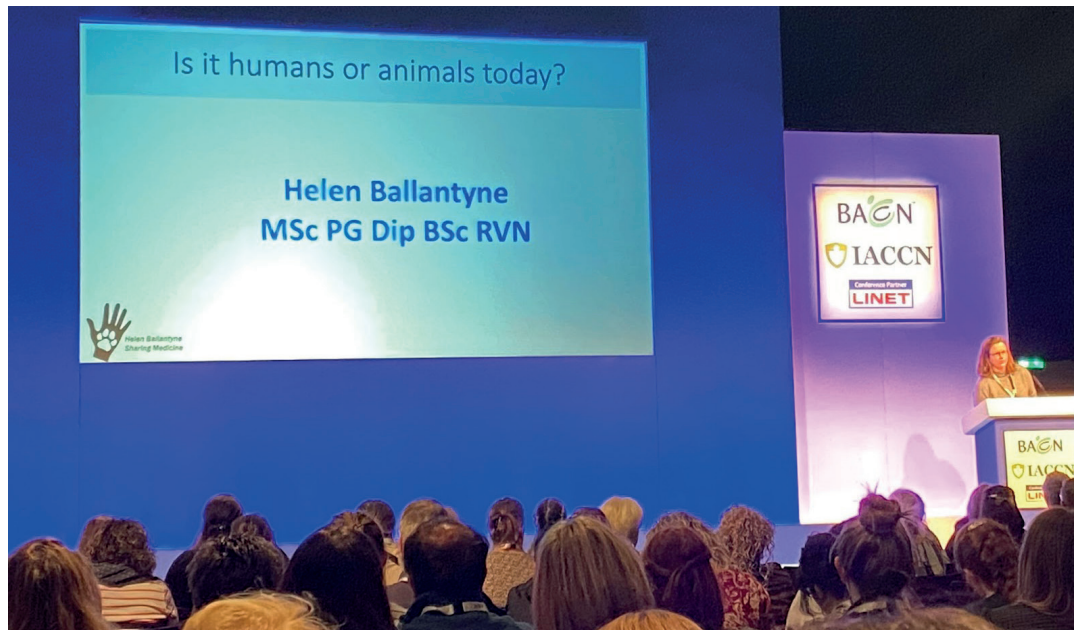


In a study exploring if AAI improves pain perception in polymedicated geriatric patients with chronic joint pain (Rodrigo-Claverol et al, 2019), patients reported reduced pain, discomfort, and stress; additionally, stress among nursing staff was found to decrease significantly following AAT sessions. Pets were found to contribute to a stronger sense of identity in owners with mental health conditions, including reducing negative perceptions of a condition or diagnosis.

Pets provide a sense of security and routine in the relationship, which reinforces stable cognition (Martins et al, 2023). Dogs and cats play an integral part in the rehabilitation and mobilisation of humans; more than 7,000 people rely on an assistance dog for a range of conditions (Assistance Dogs UK).

The question is: "How can human nursing embrace the health benefits of pet ownership to drive recovery, rehabilitation and, ultimately, reduce the numbers of people being admitted to hospital, and what can veterinary staff do to lead the conversation?"

Part of that answer must include the two disciplines talking to each other, exploring different avenues of collaboration that might include getting help understanding the dynamic between your patient and their pet at home. How can you use that relationship



to a positive end? Understanding the connection between unhealthy lifestyles and the survival outcomes of pets (Plante et al, 2023).

The human-animal bond between a person and their pet can be so strong that those experiencing homelessness may often forego services and/or food for themselves to provide for their

beloved pet. One health clinics are a unique interdisciplinary way to provide health care to both the human and their companion pet as one family unit. Health care is provided to each individual alongside examining the intersectionality, which can include zoonotic diseases, nutritional and mental health to name a few.

The gold standard of care for a true one health clinic is to be a fully integrated clinic where both people and pets have access to primary health care at one place and at one time, where both the human and veterinary health care providers create a joint health care

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# One health

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plan (Sweeney et al, 2018). The bond we share with our pets is important for many; unfortunately, this is often exploited in violent and or abusive relationships, where it is used to gain power and control over the person and or family members. This can range from threatening to harm the pet, to stopping someone being able to care for their companion pet in the way they want to. Staff in human-centred hospitals and veterinary practices should both be able to signpost cases of domestic abuse to charities that will help with their pets at home. Studies have confirmed that in households with companion animals experiencing domestic violence and abuse, a high probability of animal abuse exists.

The National Link Coalition is an organisation working to increase awareness of the connection between animal cruelties and domestic and community violence, and they have highlighted that:

- 70 per cent of people who have committed animal abuse also had criminal records that included crimes of violence, property, drugs, or disorderly behaviour (Arluke and Luke, 1997).
- 71 per cent of women who experienced domestic abuse said their partners had harmed, killed or threatened pets (Ascione et al, 1997).
- 60 per cent of families where child abuse took place were also found guilty of animal abuse (DeViney et al, 1983).
- 63 per cent of “aggressive” criminals were found to have deliberately harmed animals in childhood (Schiff et al, 1999).
- 70 per cent of people charged with cruelty to animals were also known by police for other kinds of violent behaviour (Boat and Knight, 2000).

A significant challenge is that it is often difficult for those leaving violent situations to keep their pets with them, resulting in them delaying fleeing the situation due to concerns regarding the safety of their companion animal; Tiplady et al (2012) reported that nearly 35 per cent of women delaying seeking refuge for this reason.

Those in these circumstances are often unaware of the various programmes available to assist

families with companion animals by providing pet care when an individual needs to escape quickly. Many animal welfare agencies provide emergency accommodation. Many refuges can in certain circumstances accommodate the animal, but these needs expanding. Children especially often rely on their pet to provide stability, security and companionship.

Can we work together to ensure families, and their pets stay together at a time of need? The human-animal bond is a mutually beneficial relationship between human and animal. The key is the word “mutual”, which means we must have the animals’ needs considered alongside the humans. Veterinary practice does not just treat animals. We have a unique window into the human-animal bond in action. We counsel, listen and work with humans, taking into consideration medical needs and barriers, finances and well-being. It is impossible to just treat the pet.

We manage expectation and hope, and consider the unique role the pets play in the owners’ life, as well as dealing with the owners’ own personal experience with health care. These are just a few of the considerations we must put forward when deciding on treatments. With the increase in pet ownership and the reliance on pets for companionship, healthy lifestyles and a myriad of other reasons, the conversation between human and veterinary medical care has never been more critical.

A particular discipline of veterinary and human care that shares many treatments and research is critical care. Human and veterinary emergency and critical care share attitudes and values, and provide a multitude of opportunities for the development of both professions.

Emergency and critical care management of cats and dogs is similar to that of humans. Veterinary critical care teams have access to advanced diagnostics and imaging, capnography and invasive haemodynamic monitoring. Critically ill animals can require ventilation, interventional radiology, haemodynamic support, transfusions, renal replacement and complex interventional cardiology similar to human patients. Therefore, we believe cooperation between human and veterinary critical care nurses can provide a bidirectional, synergetic pathway that can benefit both.

## Now what?

The BVNA and the British Association of Critical Care Nursing (BACCN) has decided to join forces and create a working group. Our remit is to continue to explore the possibilities of working together for the health and well-being benefits of all our patients.



We aim to discover new ways of working. Learning from the years of expertise and practice from both sides. Veterinary medicine is at the forefront of research looking at how as a planet we can live more harmoniously with animals; how can we avoid the next pandemic; and how can we help humans and pets lead a healthier life?

Helen Ballantyne presented on this unique one health collaboration while delivering a keynote session at the first ever joint BACCN and Irish Association of Critical Care Nursing conference in Belfast in 2022.

She later reflected on this and said: “The vision of (this joint work) is to provide a unique collaborative learning experience: the opportunity for VNs to learn from experienced intensive care nurses, who have novel technology at their fingertips, access to advanced, contemporary clinical research and, like their veterinary counterparts, a genuine passion to do the very best for their patients.

“There (are) plans in place to encourage and provide funding support for critical care VN research, promote evidence-based practice, and design exchange programmes so that ITU nurses might see how a veterinary ITU works, and vice versa. While it is only natural to suggest that most of the

learning benefit will be towards the younger, greener veterinary nursing profession, clear benefits exist for human-centred nursing and patient care, too.”

She added: “Consideration of the human-animal bond may make human-centred nurses’ lives a little easier, and maybe even prevent ITU admissions through supportive health promotion. Collaboration could support antibiotic stewardship, and clinical research may offer novel treatment options across the species.” (Ballantyne, 2023).

Alongside Helen’s session, other veterinary critical care nurses delivered both oral and poster presentations covering subjects such as tracheostomy and nasogastric tube feeding safety, as well as a session on veterinary euthanasia. Since then, we worked on a mutual exchange programme enabling observational visits to both a human and veterinary critical care unit, respectively.

We are looking for nurses who would be interested in finding novel ideas and conversations around this topic. Or, if you would just like to find out more with no obligations, contact the Veterinary Critical Care Nursing team via [baccn.vccn@gmail.com](mailto:baccn.vccn@gmail.com) or visit [www.baccn.org/regions/Veterinary-Critical-Care-Nurses](http://www.baccn.org/regions/Veterinary-Critical-Care-Nurses)

## References

Arluke A and Luke C (1997). Physical cruelty toward animals in Massachusetts, 1975-1996. *Society and Animals* 5(3): 195-204.

Ascione FR, Weber CV and Wood DS (1997). The abuse of animals and domestic violence: A national survey of shelters for women who are battered. *Society and Animals* 5(3): 205-218.

Assistance Dogs UK, [www.assistance dogs.org.uk](http://www.assistance dogs.org.uk)

Ballantyne H (2023). BACCN 2022 Conference: the importance of collaboration, *VN Times* 23(1): 6.

Boat B and Knight J (2000). Experiences and needs of adult protective services case managers when assisting clients who have companion animals. *Journal of Elder Abuse and Neglect* 12(3): 145-155.

Care Quality Commission (2023). [www.cqc.org.uk](http://www.cqc.org.uk)

Corr A, Lund TB, Sandøe P and Springer S (2024). Cat and dog owners' expectations and attitudes towards advanced veterinary care (AVC) in the UK, Austria and Denmark. *PLoS One* 19(3): e0299315.

DeViney E, Dickert J and Lockwood R (1983). The care of pets within child abusing families. *International Journal for the Study of Animal Problems* 4(4): 321-329.

Fawcett N, Gullone E and Johnson J (2002). The relationship between animal abuse and domestic violence: implications for animal welfare agencies and domestic violence organisations. *Domestic Violence Clearinghouse Newsletter* 10: 4-7. Available online at: <https://web.archive.nia.gov.au/awa/20060118231025/http://pandora.nia.gov.au/pan/51495/20060119-0000/Newsletter10.pdf>. Last accessed on: 03/11/2024.

Jegatheesan B, Beetz A, Ormerod E et al (2018). International Association of Human-Animal Interaction Organizations: IAHAIO white paper: the IAHAIO definitions for animal assisted intervention and guidelines for wellness of animals involved. [tinyurl.com/4uvs6njd](http://tinyurl.com/4uvs6njd)

Martins CF, Soares JP, Cortinhas A et al (2023). Pet's influence on humans' daily physical activity and mental health: a meta-analysis. *Frontiers in Public Health* 11: 1196199.

Mencke N (2024). One health: in the context of pet ownership. *Vet Times* 54(17): 12-14.

PDSA (2024). PDSA Animal Welfare Report (PAW): the essential insight into the wellbeing of UK pets. [tinyurl.com/sh6mwmfj](http://tinyurl.com/sh6mwmfj)

Plante A, Bedrossian N, Cadotte G et al (2023). Pet ownership and lifestyle behaviours of immunosuppressed individuals and their relatives in the context of COVID-19 pandemic. *Preventive Medicine Reports* 33: 102210.

Rodrigo-Claverol M, Casanova-Gonzalvo C, Malla-Clua B et al (2019). Animal-assisted intervention improves pain perception in polymedicated geriatric patients with chronic joint pain: a clinical trial. *International Journal of Environmental Research and Public Health* 16(16): 2,843.

Schiff K, Louw D and Ascione FR (1999). Animal relations in childhood and later violent behaviour against humans. *Acta Criminologica* 12: 77-86.

Surma S, Oparil S and Narkiewicz K (2022). Pet ownership and the risk of arterial hypertension and cardiovascular disease. *Current Hypertension Reports* 24(8): 295-302.

Sweeney JM, Crook PZ, Deeb-Sossa N et al (2018). Clinical one health: a novel healthcare solution for underserved communities. *One Health* 6: 34-36.

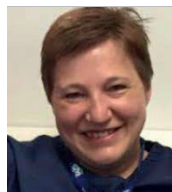
Westgarth C, Christley RM, Jewell C et al (2019). Dog owners are more likely to meet physical activity guidelines than people without a dog: an investigation of the association between dog ownership and physical activity levels in a UK community. *Scientific Reports* 9(1): 5,704.

World Health Organization (2017). One health. [tinyurl.com/mryfswc2](http://tinyurl.com/mryfswc2)



Laura Edwards

Laura is a critical care veterinary nurse who has worked for The Royal (Dick) School of Veterinary Studies in Edinburgh for 12 years. In 2019, Laura became a lecturer in veterinary nursing at Scotland's Rural College and continues to develop new learning opportunities for both SVNs and veterinary alumni who wish to expand their knowledge and study after qualification. Laura's interest turned to one health after attending a British Association of Critical Care Nursing (BACCN) conference in 2019. As a result, she started a collaboration with BACCN and in 2021 was asked to create a veterinary nursing committee within the organisation – the first within a human nursing organisation. This allowed for fantastic learning opportunities and the creation of a working group with the BVNA. Laura has spoken annually at both the BACCN conferences and BVNA, highlighting this collaborative work since 2021.



Karin Gerber

Karin joined the British Association of Critical Care Nursing (BACCN) National Board in 2013, taking on the role of regional advisor and took over the role of conference director in 2017. Karin brings 30 years of clinical critical care nursing experience to the team, having trained and worked in South Africa and the UK. She works clinically in a busy district general hospital (DGH) in the South of England. She has attended and presented at several local, national and international critical care conferences, and has organised many educational events for both the BACCN and the DGH where she works. Karin is passionate about all things critical care nursing related and is an active social media participant/advocate, taking the lead on the BACCN's social media activity to explore current critical care issues with practitioners from across the world.

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# VN Voice

## Vintage vet nurses: the passion is still present

Isobel Dorr BSc(Hons), RVN, ISFM DipFM and AdvCertFB, explains how she has kept her love for the job by learning something daily

**About 14 years ago, a colleague asked me: "where are all the older veterinary nurses?"**

As I was about to turn 40 within a few months at the time, I'd never really thought about either being old or wondering whether there was a fabled place for the worn out RVN to go to, a bit like the legend of the graveyard for elderly elephants.

We were both "nurses" who had been working in practice before the requirement to be qualified and go on to the register. She had completed her training two years prior, and I was about to embark on my level 3 diploma and go back to college at 39.

Here started my passion for learning again, some 20 years after graduating with a degree in biochemistry. I really enjoyed the exchange of knowledge and case discussions in class, filling all the gaps in my nursing.

### Fast forward

Fast forward 11 years on, and that desire to learn and my passion for nursing is still present. I've not found any complacency in thinking I do not need to bother with further study, or that I've done it all now and got the T-shirt.

My career has taken me from working as an RVN in general practice, to a practice manager and back to an RVN again, but this time in two places: in a specialist referral practice

and in an emergency and critical care hospital at weekends.

### What motivates you

Finding out what it is that motivates you and where you think your skill set is suited is key to keeping you in this profession.

I feel I am constantly learning every day, and there is always something new to take away from each shift. It is important to find CPD to keep you motivated and engaged.

I enjoy working with SVNs, as they have all the latest tips from college to bring into practice, while our older RVNs provide a solid reassuring presence, helping with their training.

### Knowledge grown

I've enjoyed getting to work in different teams and feel my knowledge has grown enormously in ophthalmology and emergency and critical care – two areas I'd not really considered working in prior to taking the leap of leaving my previous practice of 17 years.

Life takes you in lots of different directions, but find what you want to do and do it, recognising that unless you try, you'll never know. I'm certainly not ready to hang up that stethoscope just yet.

