Veterinary Ethics Conference

Proceedings Booklet

27—29 September 2023

Messerli Research Institute

University of Veterinary Medicine,Vienna

Proceedings booklet

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Messerli Research Institute
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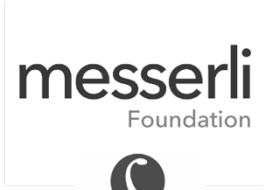
edited by
Svenja Springer
Herwig Grimm

Acknowledgments

This proceedings booklet contains contributions presented at the Veterinary Ethics Conference 2023 in Vienna. Herewith we aim at exchange among scholars in the field and further institutionalizing the field of veterinary ethics by focusing on debates on recent developments, current and future potentials as well as possible challenges.

We would like to thank the European Society for Agricultural and Food Ethics (EurSafe) for supporting us in the idea to organize this conference as an interim-event of the scientific society. Furthermore, our sincere thanks go to the Messerli Foundation, Messerli Research Institute, University of Veterinary Medicine, Vienna, the Federal Ministry of Social Affairs, Health, Care and Consumer Protection, the Federal Ministry of Education, Science and Research, Austrian Chamber of Veterinary Surgeons, Lower Austrian Animal Health Services, Tecniplast Germany and Purina. They did not only support the idea of the conference but also helped realize it with their financial support.

Further, we would like to thank external reviewers who provided their expertise and constructive criticism during the review process.



Veterinary Ethics as part of wider ethical discussions in agriculture and food

On the relation with the European Society for Agriculture and Food Ethics (EurSafe)

The Veterinary Ethics 2023 conference is part of the activities supported by the European Society for Agriculture and Food Ethics (EurSafe). EurSafe started in 1999 and is an international organisation focusing on the full range of ethical issues in the fields of agriculture, food, animals and the environment. It is an academic association, but is explicitly open to a wide range of professionals who are involved in the ethics related to food and agriculture. EurSafe aims to discuss ethical issues in an interdisciplinary way in order to do justice to the complexity of the ethical questions and challenges related to future food production and consumption, the position of animals and the environment, but also the role of technology in these debates.

From this perspective, veterinary ethics - as a domain at the intersection of professional ethics and animal ethics - fits very well into the mission and scope of EurSafe and has been an important theme of the Society's conferences since its inception. Within the EurSafe community, a significant proportion of the members have an interest in this area and the society includes scientists working at the interface between veterinary medicine and ethics, many of whom work closely with professionals in the veterinary field. This is reflected in the many papers that have been published on this topic as part of the EurSafe conferences (see Transforming food systems: ethics, innovation and responsibility (wageningenacademic.com)) in recent years. Furthermore, this Veterinary Ethics 2023 conference is part of a tradition of meetings on veterinary and professional ethics, including previous conferences in Vienna, Utrecht and Nottingham and international summer schools.

If you are not yet involved in EurSafe, I cordially invite you to visit our website for more information and membership (www.eursafe.org). We welcome members from different disciplines and different professional and regional backgrounds, and aim to function as an open and welcoming community. I would also like to draw your attention to our next EurSafe conference entitled "Back to the Future. Sustainable Innovations for Ethical Food Production and Consumption". The conference will celebrate 25 years of EurSafe conferences and will take place in Ede (NL) from 11-14 September 2024.

On behalf of the EurSafe Society, I would like to express my sincere thanks to the Vienna team for taking the initiative and organising this conference with a very attractive programme. I wish you all an inspiring conference!

Franck Meijboom

President of the European Society for Agriculture and Food Ethics

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Foreword

People in the veterinary profession face diverse ethical challenges due to their unique positionality in complex human-animal relationships. These challenges have found increasing recognition in societal, political and academic debates, leading to the development of veterinary ethics as an interdisciplinary field of inquiry. Veterinary ethics aims to investigate ethical challenges and help (future) professionals navigate the tensions they encounter in their practice. On this background, it is our pleasure to introduce the proceedings booklet of the Veterinary Ethics Conference 2023 including 39 abstracts on a wide range of ethical issues. Together, they demonstrate how veterinary ethics has developed and has been institutionalized as a multifaceted, multibranched and indispensable field in academia and in practice.

One of the main drivers to organize this conference was to showcase the diversity of methods to reflect on ethical challenges in the veterinary profession. Empirical approaches, theoretical accounts as well as ethical tools have been applied in this field to better understand occurring challenges and provide answers to how veterinarians should deal with challenges that arise in specific working fields. Hence, in addition, the conference booklet comprises research that focusses on the development and implementation of ethical standards and codes of conduct to provide guidance to veterinarians and promote and protect the integrity of the profession. Further, some of the abstracts explore potentials and challenges when teaching ethics to (future) veterinarians.

We are confident that the abstracts included in this conference booklet highlight the various tasks and responsibilities placed on the field of veterinary ethics as well as methods to address them. We believe that these contributions constitute a fruitful ground for current and future exchange among researchers working in the diverse branches of veterinary ethics, and go beyond the academic borders by facilitating conversations between researchers, (future) veterinary professionals and representatives of the veterinary profession.

We would like to thank all authors for their abstracts and all participants who will present their work in the course of the parallel sessions of the Veterinary Ethics Conference 2023. In addition to the parallel sessions, we included workshops with invited experts not only to make the format of the conference more dynamic, but also to enable the participants to exchange in small groups on different substantive and methodological issues in the field of veterinary ethics. Hence, we would like to thank our invited experts for their effort and the organization of inspiring workshops.

We are also pleased that Anne Quain, Peter Sandøe, Sabine Salloch and Sean Wensley agreed to frame the Veterinary Ethics Conference 2023 with their keynotes, and will draw attention to diverse approaches in the research field, explore methodological questions and focus on veterinary ethics in practice and on the societal level. Instead of abstracts, short interviews were conducted with our four keynote speakers that introduce the contents and background of their presentations.

We hope you will enjoy reading this conference booklet and we thank all participants for joining the Veterinary Ethics Conference 2023 in Vienna.

Svenja Springer and Herwig Grimm

Unit of Ethics and Human-Animal Studies
Messerli Research Institute
University of Veterinary Medicine, Vienna

Keynote interviews

I. Three forms of veterinary ethics – prescriptive, descriptive and reflective

Interview with Peter Sandøe *(University of Copenhagen, Denmark)*

In your talk you explore three forms of veterinary ethics: prescriptive, descriptive and reflective. Why is this distinction so crucial in veterinary ethics?

Firstly, prescriptive and descriptive ethics differ methodologically. The latter is based on methods from social science and/or history, while prescriptive ethics may be based on a branch of philosophical inquiry but may also be more personal or emotional. Here it is important to notice that there are textbook standards for how to conduct most forms of social science or history studies. However, what counts as proper philosophical inquiry in the field of ethics (and in most other fields) is highly controversial – with different schools of thought existing in parallel.
Secondly, veterinary ethics is a form of professional ethics. It consists of ethical standards applying to, and to a large degree formulated by, the members of a profession. Here there is typically a core of values and norms that are taken for granted – at least in the short term. This is where reflective ethics becomes relevant. It takes as its starting point some of the taken-for-granted values and norms, perhaps based on insights from empirical veterinary ethics, but also seeks dilemmas and controversies within the profession with a view to engaging members of the profession and other stakeholders in a reflection on how to improve and develop.

An interest of yours lies in the area of responsible conduct of research. Do you see any particular issues that are unique to veterinary ethics and responsible conduct of research?

Certainly, there are at least two kinds of issues relating to responsible conduct of research of high relevance here. Firstly, all studies in empirical ethics that involve veterinarians, clients and/or patients must comply with standards for research on human subjects and/or for research on animals and must be properly assessed by an institutional review board or another relevant body. Secondly, it is important to be transparent about how one's views on ethics are substantiated.

Please finish the following statements:

In my current job, I wish I had known before...
...that social science studies can inform ethical thinking.

(Young) scientists working in the field of veterinary ethics should...
...find a way to do their studies that will enable them to build an academic career.

My TED-Talk would be about...
...domestic cats.

If I could meet any famous person in history or present, I would meet...
...David Hume and go for walk with him in Edinburgh.

When I think of Vienna, I think of...
...Sigmund Freud and delicious cakes.

II. Why it's bad to be good. Field notes from a career in veterinary ethics

Interview with Anne Quain *(University of Sydney, Australia)*

In your talk you will present field notes from a career in veterinary ethics and explore "Why it's bad to be good." Do you think it could be good to be bad sometimes as well?

Short answer: it depends. Longer answer: our world is full of examples where "bad" behaviour is rewarded. If you're a consequentialist, then being bad could be very good! But the moral of the story is not that it's good to be bad, rather that it can be helpful to appreciate how and why it can be bad to be good.

Can you give an example how your practical work as a veterinarian has influenced your research in veterinary ethics, and vice versa?

Veterinary clinical work is very atomised, it is all consuming, it forces us to focus on the macro and pragmatic challenges of everyday life. It is the site where unintended consequences unfold and it generates moral stress – not just life and death decisions, but seemingly minor things or things that people don't always reflect on. Like how we treat patients, animals who aren't patients, colleagues and clients. We are always making decisions in the face of incomplete information – and this has informed my research in veterinary ethics.
Veterinary ethics allows us to zoom out a bit. One thing that has influenced my practice is just appreciating that moral stress and distress are universal. Or at least international. And moral stress/stress is often a symptom of systemic challenges that require broad-level approaches, not just individual action.

Please finish the following statements:

In my current job, I wish I had known before...
...that I would spend much of my energy managing and battling anxiety – mine, as well as that of patients, clients, colleagues and students.

(Young) scientists working in the field of veterinary ethics should...
...spend as much time as they can in the workplace settings they study.

My TED-Talk would be about...
...why TED talks make me uneasy.

If I could meet any famous person in history, I would ...
...be very torn. The temptation would be to meet and spend time with someone I admire, like Spinoza. But maybe it would be better to meet someone whose views I disagree with profoundly, and try to exert some influence, however small.

When I think of Vienna, I think of...
...string quartets, beautiful architecture, and snow.

III. The Birth of the 'Digital Turn' in Bioethics. Perspectives for Veterinary Ethics

Interview with Sabine Salloch *(Hannover Medical School, Germany)*

In your talk you will present the birth of the "Digital Turn" and further explore perspectives for veterinary ethics. What are the controversies with respect to the digitization of the (veterinary) medical profession?

Major issues arise with respect to human-machine-interaction and the physician's or vet's professional role: How much trust can we place in AI-driven recommendations in the diagnostic or therapeutic context? How can we responsibly deal with phenomena such as overreliance in machines, automation bias and de-skilling? How can we prevent discrimination, e.g. of individuals who are underrepresented in the training data? Digitization is also shaped by the fact that patients increasingly use AI-driven applications (such as "symptom checkers") prior to seeking contact to formal health care structures. This increasing use not only of internet resources, but of consultant-like chatbots might also play a role in veterinary practice, e.g. in communicating with pet holders or farmers. I see also major challenges in securing the fair allocation of digital health care resources to everyone who might profit from them. At the same time, I see the danger of a "two tier" health care system in which care by human specialist remains to privileged groups of society whereas other patients are increasingly referred to digital services.

Your primary research interest lies in the field of human medical ethics and medical professionalism. What should veterinary ethics definitely not learn from human medical ethics?

My first answer would be that the anthropocentric view inherent to human medical ethics, of course, is not fitting for veterinary practice. But this seems too simple, especially in light of "One Health" as an increasingly important paradigm of biomedical research and health care practice. "One Health" reminds us that human health cannot be fully reached in many fields (i.e. infectious diseases or nutrition) without considering animal health as well. Both are dependent on the preservation of the environment. Recent research makes us impressively aware of how much climate change endangers human and animal health in many regions of the world in the near future. So, maybe the message towards veterinary ethics would be not to remain as focused as human medical ethics often is but to think globally and consider the interrelatedness of the (mental and physical) health of animals and humans in an intact ecosystem.

Please finish the following statements:

In my current job, I wish I had known before that...
...there is such as enormous breadth of topics I can legitimately address as a medical ethicist.

(Young) scientists working in the field of veterinary ethics should...
...not to remain too much restricted to their particular topic of research but also attend classes, workshops and conferences from more or less related fields.

My TED-Talk would be about...
...physicians' professional ethics in light of climate change.

If I could meet any famous person in history, I would meet...
...Aristotle, as a time journey in ancient Greek culture would be the most fascinating think I could imagine (even if as a woman it might not be that easy to get involved).

When I think of Vienna, I think of...
...my first visit to Vienna as a 15-year-old school girl with my dreams of becoming a musician (which luckily never happened).

IV. Through A Vet's Eyes: How We Can All Choose a Better Life for Animals

Interview with Sean Wensley *(Senior Veterinarian, PDSA, UK)*

In your talk you will discuss ideas from your recently published book "Through a Vet's Eyes". When witnessing human-animal relationships, how many perspectives does a veterinarian need and how should veterinary experiences be translated into positive actions?

Veterinarians are at the coalface of human-animal relationships, with privileged insight into how those relationships feel for both the humans and the animals. Those who keep and use animals value veterinary assistance in ensuring the animals continue to provide human benefits. The animals value having an advocate for their interests: veterinarians, who have professional obligations to protect and improve animal welfare, and do so guided by evidence and ethics. Many in society value the realisation of an ethical position in which animal use can be justified, predicated on the animals experiencing a good life and a humane death.
Veterinarians, with an eye on multiple ethical stakeholders, are working with others to help make the world a better place for animals. We navigate a delicate boundary between providing robust animal advocacy whilst maintaining trust and influence amongst animal keepers and users. Animal welfare advocacy presents challenges for individual veterinarians in their daily work, sometimes with resulting moral stress; however, veterinarians are assisted by representative veterinary bodies taking a clear public position on issues affecting animals. While progressing animal welfare internationally, the veterinary profession is also mindful of the intersections between animal welfare and other pressing global challenges, including climate change, biodiversity loss and antimicrobial resistance. Through A Vet's Eyes attempts to bring some of these complex issues to a non-specialist audience, to help stimulate and inform societal discussion. It is unflinching in its descriptions of animal welfare harms, backed by animal welfare science, but hopeful and optimistic about possible ways forward.

What are the biggest milestones, but also setbacks, that have occurred in the last years in implementing animal welfare?

There have been numerous positive developments: scientific (the continuing high number of research papers being published on animal welfare); conceptual (e.g. the shift in focus towards positive welfare and securing a good life for animals); corporate (e.g. food businesses signing up to the Better

Chicken Commitment); societal (e.g. increasing public scrutiny and debate about animals used in sport and entertainment); veterinary (e.g. a series of international veterinary position statements, clarifying and promoting the profession's contemporary roles in animal welfare advancement); policy (e.g. the European Food Safety Authority's stretching 2023 animal welfare recommendations and the United Nations Environment Assembly adopting a resolution in 2022 on the nexus between animal welfare, the environment, and sustainable development); legal (e.g. the growing interest in animal welfare and animal rights amongst lawyers, and legislative commitments such as the European Commission's commitment to 'End The Cage Age' in Europe).
Remaining challenges include the need for animal welfare improvements to occur globally, coupled with animal welfare-protective trade deals, to reduce the risk of exporting animal welfare problems between global regions. The provision of information to citizens, to promote awareness and engagement, should continue to grow. The journey towards food system transformation, securing high levels of animal welfare, biodiversity and other social goods, is ongoing; what this will mean for sustainable consumption levels of animal-derived foods amongst global populations, and the scaling up of new technologies, is yet to be determined.

Please finish the following statements:

In my current job, I wish I had known before that...
...hard-won change must be sustained as well as achieved.

(Young) scientists working in the field of veterinary ethics should...
...recognise the importance of their work and know that they are contributing to animal and human health and happiness. They should also take steps to protect their own wellbeing, such as by prioritising their leisure time and having a support network.

My TED-Talk would be about...
...humanity's journey towards treading more gently for sentient animals, while protecting the natural world for its joy, wonder and intrinsic value.

If I could meet any famous person in history, I would meet...
...the late Sir Peter Scott, pioneering conservationist and son of the Antarctic explorer, Captain Robert Scott.

When I think of Vienna, I think of...
...picturesque Christmas markets.

Section 1

Chances and challenges in teaching (future) veterinarians in ethics

1. Ethics in Swedish veterinary education - from two perspectives

S. Sternberg Lewerin[1] and H. Röcklinsberg[2]*
[1]Department of Biomedical Sciences and Veterinary Public health, Swedish University of Agricultural Sciences, Uppsala, Sweden; [2]Department of Animal environment and health, Swedish University of Agricultural Sciences, Uppsala, Sweden; susanna.sternberg-lewerin@slu.se

Background
Ethical competence is crucial for veterinary practice and a specified part of Day One competencies (Directive 2013/55/EU). However, the curriculum content aiming to provide this competence differs between veterinary education establishments (Magalhaes-Sant'Ana, 2014). During their education, veterinary students gain a deeper insight into ethical issues facing the veterinary profession and they may also change their attitudes and approaches to these issues (Herzog *et al.*, 1989; Roder, 2017). In addition, veterinary students sometimes perceive a gap between 'ethics as theory' and veterinarian approaches to value issues, and the teachers' views on veterinary ethics and veterinary professionalism may differ substantially (Magalhaes-Sant'Ana *et al.*, 2014; Roder and May, 2017). More specifically, ethics professionals usually emphasize the importance of improving students' knowledge in theories and reflective skills while veterinary professionals may be more inclined to emphasize professional rules and contributing to the societal role of the veterinary profession (Magalhaes-Sant'Ana *et al.*, 2014).

Ethics in the Swedish veterinary curriculum
In order to bridge the gap described above, ethics taught by both ethicists and veterinarians is included in the 5.5 years of Swedish veterinary curriculum. 'Ethics as theory' is taught by a university lecturer in animal ethics, and runs through the entire programme while the bulk is allocated to two courses (year 3 and 5). In addition, a series of regular voluntary open workshops on topical ethical issues, proposed by any student or teacher or the ethicists, is offered every semester. Veterinarians provide introductory lectures in pre-clinical and clinical years on ethical dimensions in veterinary practice, including discussions about the ethics policy of the Swedish Veterinary Association and the moral and legal obligations as regards veterinary patient secrecy. During the clinical training, ethical issues should ideally be part of the everyday discussions but this may be hampered by time constraints and the need to prioritise technical and medical skills.

Collaboration between teachers
Communication and collaboration between teachers in different disciplines (i.e. various aspects of veterinary medicine as well as ethics) is crucial to bridge the gap between 'ethics as theory' and veterinarian approaches to value dimensions. In this presentation, the authors share their own experiences from such collaboration.
One element in the third year of the veterinary programme consists of case-based discussions on ethical perspectives of the statutory management of

contagious animal diseases, led by one ethics expert (HR) and one veterinary expert (SSL). The students have learned about ethical theories in previous parts of the curriculum, and in the course where this exercise takes place, the legislation governing animal disease management and animal welfare is included. After a recap of previously taught ethical theories, students are grouped and each group assigned a specific case of a notifiable disease, created by the teachers. The task is to link ethical reasoning to their new knowledge about the legislation governing the management of these diseases. The cases include a suspected positive tuberculin test on an imported alpaca, a pig farm having received pigs from another farm that has just been diagnosed with African swine fever, an anthrax outbreak in a nature preservation area, an illegally imported puppy, and a family cat with suspected tuberculosis. The students are given some suggestions about management options, ranging from euthanasia/slaughter to doing nothing to manage the disease risk and asked to discuss these from different normative ethical theories, e.g. utilitarian, deontological, animal rights, virtue ethics and care ethics.
After discussions in their respective group, when the two teachers are available for questions, the students are asked to share the main points from their discussions with the entire class. In the following discussion the teachers contribute with nuances and reflections. Interaction between the two teachers encourage students to question their own and others' perspectives while emphasising the balance and difference between personal view, ethical theory and legal obligations. The potential conflict between personal feelings and legal requirements is discussed. The discussion also highlights how ethical theories are useful for disentangling and understanding personal views as well as their limitations in decision-making in veterinary practice.

Course evaluations
Although course evaluations often have a low response rate and may reflect the views of critical students rather than those with less strong opinions, they give valuable insight to students' perceptions. Based on course evaluations for a number of years (with somewhat varying curricula) we see signs of the phenomenon described by Magalhaes-Sant'Ana *et al.* (2014) regarding the the teachers' aim of ethics in veterinary education. We hypothesize that there is a parallel dichotomy among students: students holding a critical approach to the theoretical part of the exercise have difficulties seeing the added value of discussing ethical theories in a practical context. Further, also in line with literature, it might be the case that they would prefer to be presented with a set of professional rules with less room for reflection. The somewhat negative course evaluations are interesting also in relation to the very good performance of most students during the discussions, and their positive approach to discussing ethical aspects in later years. However, ethical theories, while providing answers to certain moral viewpoints, may be perceived as too limited to structure and support students in their decision-making.

Conclusions
We argue that the educational challenge in teaching ethics emanates from the widespread interest among the students, calling for the fine balance between a

too theoretical approach vs lack of nuances in ethical elaboration, and for ways to help students realising that their training in application of different ethical theories is a hidden asset in their future responsibilities as veterinarians. Hence, we regard it important to promote structured thinking and insight into ethical theories to avoid students falling into the trap of confusing legislation or personal beliefs and attitudes with ethics.

References

Directive 2013/55/EU of the European Parliament and of the Council amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System.

Herzog Jr, H.A., Vore, T.L. and New Jr, J.C. (1989). Conversations with veterinary students: Attitudes, ethics, and animals. Anthrozoös, 2: 181-188.

Magalhaes-Sant'Ana, M. (2014). Ethics teaching in European veterinary schools: a qualitative case study. Veterinary Record, 13, doi: 10.1136/vr.102553.

Magalhaes-Sant'Ana, M., Lassen, J., Millar, K.M, Sandøe, P. and Olsson, I.A.S. (2014). Examining why ethics is taught to veterinary students: a qualitative study of veterinary educators' perspectives. Journal of Veterinary Medical Education, 41: 350-357.

Roder, C. and May, S. (2017). The hidden curriculum of veterinary education: mediators and moderators of its effects. Journal of Veterinary Medical Education, 44: 542-551.

2. Teaching animal ethics to large groups in Flanders, Belgium

S. Aerts[1,2,4] and C. De Ruyver[1,3,4]*
[1] IRED, the Institute for Law and Ethics in Veterinary Medicine, Ghent University, Ghent, Belgium; [2]Animal Welfare and Ethology Group, Odisee University College, Sint-Niklaas, Belgium; [3]Unité de recherche vétérinaire intégrée (URVI), Université de Namur, Namur, Belgium; [4]Onderzoeksgroep Ethologie en Dierenwelzijn, Ghent University, Ghent, Belgium; Stef.Aerts@ugent.be

Introduction
Ethics education in the veterinary curriculum helps to develop the critical thinking and decision-making skills that are necessary to navigate ethical decisions in the veterinary practice. Additionally, ethics education helps to promote a culture of professionalism and accountability in the veterinary profession (De Paula Vieira and Anthony, 2020; Hernandez *et al.*, 2018). By understanding and adhering to ethical principles, veterinarians are able to provide high-quality care to animals while also upholding their societal obligations.

A major aspect of Belgian higher education organisation is the system of entry without restriction. All bachelor's and master's degrees are open to any person holding a high school diploma. So, theoretically, someone with a high school diploma in woodworking could enter a university mathematics program. This system is combined with a prohibition of *numerus clausus*: with the exception of university medical and dentistry studies (and from 2023-2024 also veterinary studies) all programmes need to accept all who want to register. Obviously, this leads to important differences in the academic knowledge and skills between students. Additionally, this also translates into a very large student population (614 new entries in the Flemish vet programme in 2022).

In the following paragraphs, we describe a possible approach to the abovementioned educational outcomes when confronted with such large and heterogeneous student groups.

Teaching ethics to large groups
Obviously, a close interaction about veterinary ethical topics between teachers, people from the profession, and students would result in the best educational outcomes. On a basic level, reading (short) pieces of philosophical literature and discussing this during classes, and maybe writing short essays on practical cases, would result in a better understanding of ethical positions and their relevance in practical situations. Unfortunately, it is clear that these didactic approaches are unfeasible when dealing with groups of 400 to 500 veterinary students, or even a group of 150 first year animal care bachelor students. In those cases, one is restricted to more teacher-centred didactics. In a course on animal ethics, the objective is that students learn to reflect and reason about ethical dilemmas on animals in society and the veterinarian's role in that respect (Magalhães-Sant'Ana *et al.*, 2014).

The most important step in this situation is to tap into the motivation of students for entering the programme. Data collected by the second author (see figure 1, unpublished data) shows roughly 60% of first-year veterinary students cite the wish 'to help suffering animals' or 'to improve animal lives' as the prime reason for enrolling. Another 20% enter because they 'enjoy working with animals'.

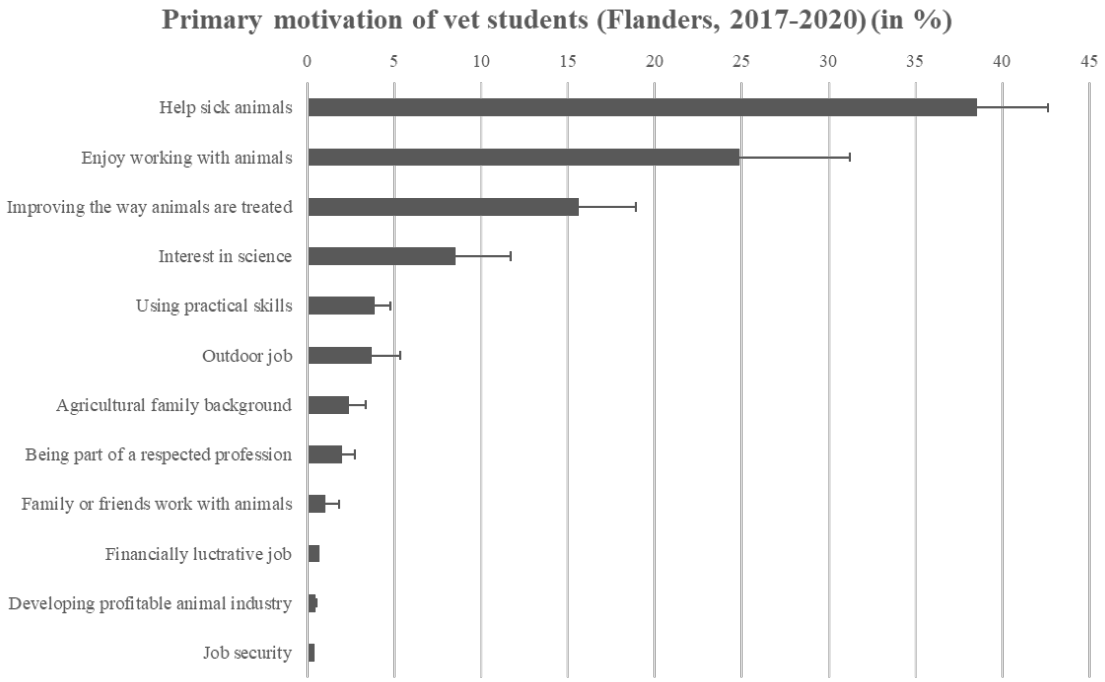

Figure 1. Primary reasons of vet students in Flanders for choosing the programme. Average percentage ± SD.

Roughly 60% cite the wish to help suffering animals or to improve animal lives as the prime reason. Another 20% enter because they enjoy working with animals. This provides ample possibilities to approach the value of animals from different ethical frameworks. Indeed, for those 80% the animal in itself is the most important element, and many would spontaneously ascribe high (moral) value to animals. From there, it is but a small step to introducing the philosophy of Peter Singer (1975) and Tom Regan (1983). Of course, in such large groups (in our case also combined with less than 10 hours allocated to ethics), it is impossible to expect students to read both books. Nevertheless, a general introduction to these two philosophical approaches to the human-animal relationship can serve as a platform to introduce vet, vet nursing and animal care students to the ambiguous position of their professional future. In many cases, they will be responsible for the care of animals that are under human control, often in situations that Singer and Regan would consider ethically unacceptable. It will at least clarify that 'easy' answers to the question of the moral position of animals are difficult, when approached from the veterinary and animal care sectors.

Depending on the time allotted to animal and/or veterinary ethics in the curriculum, specific topics can be addressed building upon the aforementioned

topics. Themes that have proven to be useful are e.g. zoos and aquaria, biotechnology, primates, the Ethical Matrix, killing animals for food production, and the ethics of animal experimentation. In order to avoid students approaching ethics in the same way as they would chemistry or anatomy, i.e. content to be assimilated and then reproduced, the authors try to describe the different ethical approaches, without actively promoting one such approach as 'the right approach'. In that respect, teaching ethics to large groups mirrors the interpretation of ethics teaching that can be found in Dürnberger (2020).

After that, the second major element can be introduced in the discussion: the students own (personal) ethical position. Using the Animal Ethics Dilemma website (http://www.aedilemma.net), it is possible to generate student-specific content that can be used for further reflection. Again, it is probably impossible to use this information during teaching in such large groups, but it is worthwhile to at least introduce this to the students. Any active engagement of students with this information will serve to enhance their understanding of the theoretical information.

To gain entry into students' thinking and link it to current ethical animal issues, the second author used five questions polling their views: What is your main motivation to study veterinary medicine? Which animal(s) live at your home? What is your diet? Whose interests should a vet think of first? And, who is the current minister of animal welfare? Students could then publicly clarify their choices on which the teacher reflected from an ethical framework.

References

De Paula Vieira, A. and Anthony, R. (2020). Recalibrating veterinary medicine through animal welfare science and ethics for the 2020s. Animals, 10: 654.

Dürnberger, C. (2020). Ethik für die Landwirtschaft. Kdp, Salzburg, 192 pp.

Hernandez, E., Fawcett, A., Brouwer, E., Rau, J. and Turner, P.V. (2018). Speaking up: veterinary ethical responsibilities and animal welfare issues in everyday practice. Animals, 8: 15.

Magalhães-Sant'Ana, M., Lassen J., Millar, K.M., Sandøe P. and Olsson I.A.S. (2014). Examining why ethics is taught to veterinary students: A qualitative study of veterinary educators' perspectives. Journal of Veterinary Medical Education, 41: 350-357.

Regan, T. (1983). The case for animal rights. University of California Press, United States of America, 474 pp.

Singer, P. (1975). Animal liberation. New York Review, United States of America, 301 pp.

3. Veterinary ethics teaching: How does it help post-graduation?

A. Hanlon[1], P. Hobson-West[2], K. Millar[3], S. Mullan[1] and A. Quain[4]*
[1]School of Veterinary Medicine, University College Dublin, Ireland; [2]School of Sociology and Social Policy and School of Veterinary Medicine and Science, University of Nottingham, UK; [3]Centre for Applied Bioethics, School of Biosciences and School of Veterinary Medicine and Science, University of Nottingham, UK; [4]Sydney School of Veterinary Science, University of Sydney, Australia; kate.millar@nottingham.ac.uk

Acting as an 'advocate' for animals is framed as a key principle for the modern veterinary profession. The importance of this role is confirmed in many reports and guidelines, for example in the British Veterinary Association's 2016 report on "Speaking Up for Animal Welfare: BVA Animal Welfare Strategy" , which cites the World Organization for Animal Health's claim that vets need to provide leadership on ethical issues. McGlacken and colleagues (2023) have argued that whilst the advocacy role is key, the concept is 'complex and eludes a single definition, encompassing multiple, sometimes incongruent, values and necessitating different approaches in practice'. Furthermore, some accounts have questioned the extent to which veterinarians who work in private veterinary practice, where economic drivers underpin financial viability, can ever act in a way that is compatible with ideas of advocacy.

For the individual veterinary practitioner, it is this complexity, and the desire to meet and manage multiple priorities that can cause ethical problems, tensions and stress. Indeed, empirical work confirms that ethically challenging situations (ECS) are commonly encountered in veterinary settings (Quain *et al.*, 2021). These are not infrequent experiences, but can be day-to-day occurrences. Such pressures on veterinary surgeons may lead to or exacerbate mental health morbidity or even mortality and may lead to role or career attrition. These pressures are also not experienced evenly across the profession. As Reinhard et al (2021) have reported, work-related stress is greater for early career veterinary graduates, and ethical dilemmas are reported to be a key contributor to stress during the transition period upon graduation to veterinary practice.

Against this background, the teaching of veterinary ethics can be seen as highly significant. As Reinhard et al (2021) advocate veterinary educators should make every effort to best prepare their graduates for practice readiness but should also consider that no level of training may be sufficient at fully preparing new graduates for the challenges of practice. There is an assumption that teaching prospective veterinarians about veterinary ethics and providing principles, tools and examples of how they may manage ECS may improve their skills in terms of resolution of ECS, and in turn this will reduce moral stress, moral distress or even moral injury otherwise associated with the challenges of day-to-day practice.

How and when veterinary ethics is taught to students varies across institutions and regions and there is notable work that has examined different teaching approaches (Magalhaes-Sant'Ana *et al.*, 2014). Whilst the time dedicated to the teaching of ethical reasoning in veterinary schools has increased in some places,

surveys suggest that many veterinarians report that they did not have enough training in dealing with ethical dilemmas. One of the issues may derive from the omnipresent challenge of time, with veterinary ethics competing with other topics in notoriously over-full veterinary curricula, where every subject must be justified against day one competencies. However, is the issue just about maximising time for veterinary ethics, and will this in itself better equip graduates to navigate ECS?

Most published research focuses on the why of veterinary ethics teaching, and whether the goal should be to teach students rules, develop virtues or enable skill (Hobson-West and Millar, 2021; Magalhaes-Sant'Ana and Hanlon, 2016). The aim of this work is to go beyond pedagogical questions of 'when' 'how' and 'how much', to examine how we can determine whether ethics training of prospective veterinarians is fit for purpose. Specifically, planned empirical work will examine to what extent recent graduates working in veterinary clinical practice actively draw on their veterinary ethics training, and identify to what degree does it help (or hinder) their navigation of ECS. A further aspect is to explore the potential to better support new graduates, who may have the experience and associate moral stress of expressing ethical values in a potentially unreceptive practice culture.

Drawing on varied literature from veterinary ethics, veterinary sociology and medical humanities, this work will raise some key methodological questions about how best to translate the thorny question of teaching impact into empirical research priorities. More specifically, we identify the following questions. First: what can we learn from existing studies which have looked at the impact of veterinary teaching on other topics, for example on animal welfare or veterinary epidemiology? Second, what are the particular research challenges raised by the need to evaluate impact of what are complex and evolving issues, in one moment in time? Third; given the role of the hidden curriculum in veterinary medicine, is it possible to attribute graduate performance in relation to ECS to explicit ethics teaching? Fourthly, are there any particular ethical issues raised by conducting research which may involve encouraging reflection of ECS? And finally, what needs to happen at practice level to improve support for new graduates to better apply their ethical values?

References

Hobson-West, P. and Millar, K. (2021). Telling their own stories: Encouraging veterinary students to ethically reflect. Veterinary Record, 188: no-no e17, https://doi.org/10.1002/vetr.17.

Magalhães-Sant'Ana, M., Larson., J., Millar K., Sandoe, P. and Olsson, A. (2014). Examining why ethics is taught to veterinary students: a qualitative study of veterinary educators' perspectives. Journal of Veterinary Medical Education, 41: 4: 1113-149R.

Magalhães-Sant'Ana, M. and Hanlon, A.J. (2016). Straight from the Horse's Mouth: Using Vignettes to Support Student Learning in Veterinary Ethics. Journal of Veterinary Medical Education, 43: 3, https://doi.org/10.3138/jvme.0815-137R1.

McGlacken, R., Anderson, A. and Hobson-West, P. (2023) Two Worlds in One: What 'Counts' as Animal Advocacy for Veterinarians Working in UK Animal Research? Animals, 13: 776, https://doi.org/10.3390/ani13050776.

Reinhard, A.R., Hains, K.D., Hains, B.J. and Strand, E.B. (2021). Are They Ready? Trials, Tribulations, and Professional Skills Vital for New Veterinary Graduate Success. Frontiers in Veterinary Science, 8: 785844, doi: 10.3389/fvets.2021.785844.

Quain, A., Mullan, S., McGreevy, P.D. and Ward, M.P. (2021). Frequency, Stressfulness and Type of Ethically Challenging Situations Encountered by Veterinary Team Members During the COVID-19 Pandemic. Frontiers in Veterinary Science, 8, https://doi.org/10.3389/fvets.2021.647108.

Section 2

Breeding in the veterinary context: Ethical considerations for changing animals

4. The unnecessary suffering of Munchkin, Sphynx, Pug and Co. in the extreme breeding practice of pets - do ethical considerations reach their limits with this phenomenon?

S. Krämer and E. Raimann
Chair of Laboratory Animal Science and Animal Welfare & ICAR3R - Interdisciplinary Center for 3Rs in Animal Research & Reseach Center for Animal Welfare, Justus-Liebig-Universität Gießen, Germany; stephanie.kraemer@vetmed.uni-giessen.de

More than 360 dog (FCI, 2023) and 90 cat breeds (WCF, 2023) are presently recognized by leading breed clubs around the globe. Selective pairing and taking advantage of spontaneous mutations led to a great variety of external appearances. Driven by the human desire to own something 'unique', extreme modifications of pets by selecting only for a particular look resulting in so-called pathological phenotypes are trending and still on the rise. The breeding of companion animals like cats and dogs with excessive bodily features e.g. extremely flat noses and round skulls with bulging eyes (brachycephalic breeds), dwarfism, hairless skin and taillessness, to name just a few, leading to severe health issues and are causing ineffable animal suffering. Brachycephalic head shapes as found in numerous pet breeds (e.g. Pug, French Bulldog, Persian Cat, Exotic Shorthair etc.) are causing respiratory problems up until episodic unconsciousness or panic attacks. Tailless cats like the Manx cat have massive problems jumping and climbing, hairless cats like the Sphynx suffer from the artificial loss of their whiskers, which, as a sensory organ, are indispensable for their sense of orientation.

Among numerous other breeds (and by all means not only domestic breeds but also so-called livestock/farm breeds), the above-mentioned pet breeds can be defined as a result of extreme breeding practices (Qualzuchtrassen) due to their breed-related health and welfare problems. There is a multitude of scientific evidence that has undoubtedly identified certain breeding traits as inherited pathologies, some of which can be analogously found in humans which are associated with considerable suffering for those affected (i.a. Schöll, 2021; Driver *et al.*, 2013). The arguments of animal rights activists about the suffering of affected animals do not resonate with supporters of extreme breeds, who often refer to traditions and the need to preserve these breeds as 'cultural heritage'. Pet owners emphasize their love for the extraordinary creatures and, in an act of cognitive dissonance, categorize obstructive breathing sounds as a breeding characteristic.

Nonetheless, animal welfare has been enshrined as a state objective in Germany's constitution, and with the amendment of the Animal Welfare Act in 2013, the so-called 'Qualzuchtparagraf' §11b had been passed. This paragraph provides that it is forbidden to breed vertebrates if it is to be expected that the offspring will be lacking in body parts or organs for the species appropriate use, or will be unfit or deformed, resulting in pain, suffering or damage. Considering this, the reality of the German breeding landscape equals a paradox, as extreme breeding practices continue to take place undisguised. The current practice suggests that there is little interest among breeders and veterinarians in charge

of the treatment of breeding-related defects in ending the breeding of creatures that suffer throughout their lives and legal consequences for breeding pets with excessive physical features are still rare. Supplementary to the Animal Welfare Act, in 2021 the Animal Welfare Dog Ordinance (Tierschutzhundeverordnung) came into force and with it in §10 a ban on exhibiting dogs with extreme breeding traits on shows. Besides the fact that the paragraph has caused chaos at numerous shows, it has not yet led to any change in breeding practices or a declining demand for breeds affected at all. Since there are no specific exclusion criteria for dog shows in Germany, no one seems to know how to practically enforce the regulations. The Paragraphs mentioned above show clearly that extreme breeding practices are not in conformity with the law, but since legal interpretation guidelines are missing, a vast sanction deficit is evident (Benner, 2022).

Considering the burden of proof, it should no longer be an 'optional' decision to breed animals with extreme breeding features: What is needed is a strict enforcement of legal requirements. Misguided love of animals must not be a basis for discretion.

Against this background, this presentation seeks

a) to give an overview of the current developments concerning the (legal) situation of extreme breeding practices of pets in Germany
b) to identify the reasons why, despite the legislation, in-praxi hardly any legal proceedings are conducted against the extreme breeding of companion animals,
c) to emphasize, how suitable veterinary assessment criteria and specified guidelines on the execution of the law can help the authorities to consistently enforce penalties against extreme breeding and
d) to highlight the need for an extensive ethical shift in thinking about breeding practices and to show how raising public awareness can influence attitudes and actions, that are likely to result in a much-needed human behavioral change.

References

Benner, L. (2022). Die gerichtliche Sanktionspraxis tierschutzrelevanter Straftaten zu Beginn des 21. Jahrhunderts in der Bundesrepublik Deutschland und in Gießen. VVB Laufersweiler Verlag, Giessen, Germany.

Driver, C.J., Chandler, K., Walmsley, G., Shihab, N., and Volk, H.A. (2013). The association between Chiari-like malformation, ventriculomegaly and seizures in cavalier King Charles spaniels. Veterinary journal, 195(2): 235-237.

Fédération Cynologique Internationale (2023). Rassennomenklatur der FCI. Available at: https://www.fci.be/de/Nomenclature/Default.aspx. Accessed 7 May 2023.

Schöll, K. (2021). Qualzuchtmerkmale bei der Katze und deren Bewertung unter tierschutzrechtlichen Aspekten. VVB Laufersweiler Verlag, Giessen, Germany.

World Cat Federation (2023). WCF EMS Code. Available at: https://wcf.de/de/wcf-ems-code/. Accessed 7 May 2023.

5. Why are you keeping a brachycephalic dog?

J. Frehner and S. Hartnack
Vetsuisse Faculty, Zurich, Switzerland; judith.frehner@uzh.ch

Background
More and more brachycephalic dogs are being kept. They do not seem to be losing their popularity, although the scientific community is working to raise awareness. With the increase in the number of brachycephalic animals kept, the health problems are also increasing massively. Ethical and animal welfare considerations are apparently often not taken into account when choosing a breed.
The aim of this study is to determine the underlying reasons for the decision to buy a brachycephalic dog. Although the veterinary profession is already improving education and communication, this qualitative research is to be used to find new starting points for targeted education against animal suffering and to explore the sociological background of such dog ownership.

Methods
The method used was semi-structured interviews with owners of brachycephalic dogs throughout Switzerland (n=30). The focus lies on the animal-human relationship. The interviews are defined by systematically applied guidelines for the design of the interview process, but still allow a maximum openness (all possibilities for expression). The transcribed interviews are coded and analysed according to Kuckartz. Its methodology allows to set certain focal points of analysis and to structure them according to codes. Content analysis is a method of empirical social research that is used to systematically and methodically extract and analyse information from texts. The method is mainly used in interpretative social research and aims to detect meanings and correlations.
Qualitative content analysis according to Kuckartz is based on the assumption that the text is a social construction shaped by social and cultural conditions. The method assumes that texts consist not only of the literal statements, but also of the meanings that develop between the lines and in the context of the text (Kuckartz *et al.*, 2022)

Results
Based on a preliminary analysis, apparently many animals are kept because of their affectionate character. In addition, the training and enrichment of brachycephalic dogs tends to be less time consuming - in contrast to dogs from working lines (e.g. border collies, shepherd dogs). Loyalty to a dog breed has hardly been studied scientifically so far but seems to be a big factor as well (Packer *et al.*, 2020). In the interviews completed so far most of the owners reported that they would choose the same breed again when acquiring a new dog. There seems to be an awareness of the health problems of brachycephalic breeds. Most of the interviewees admitted that they had been aware of the health issues. They also stated that they belief that their brachycephalic dog is healthy.

From the statements, it can be concluded that people are aware of the health status of these breeds or even expect some negative remarks from veterinarians. Thus, educational work on the part of science and framed in an empirical veterinarian perspective seems to have had limited success. Although the One Health approach recently gained momentum, looking at the human-animal bond and how dog owner construct the health of their dogs as well as their relationship with their dog, has rarely been looked. Certainly, further education is and will remain an important point in the work against animal suffering. However, a further starting point must probably be sought through legislation and stricter regulation of breeding. In the Swiss Federal Animal Protection Law, there are already clear guidelines on which animals may be bred. Nevertheless, the enforcement of these guidelines is lagging behind. Lack of resources, legal loopholes and lack of awareness among the population regarding the law are certainly important reasons for the lack of enforcement.

For stricter regulation of breeding, the veterinarians are needed. However, the role of veterinarians is not an easy one. The standard of veterinary medicine is constantly rising, especially in small animal medicine. While this leads to enormous advances in patient care, it makes decision-making more and more complex. Veterinarians are faced with massive conflicts as their decisions cannot be made for the patient's welfare alone, but they also have to take into account the client's financial background, the emotional bond between client and animal and economic aspects (Springer *et al.*, 2019). This ethical dilemma becomes even worse in the case of brachycephalic dogs. The dogs have a high degree of suffering, new treatment options are constantly being developed and pet owners often have restrictive financial resources. The question of how far medicine can and shall go with such dogs arises inevitably.

A sick brachycephalic animal cannot be deprived of veterinary treatment. However, this leads to the animals being able to reproduce further and thus the population remains stable or can even increase. Again, veterinarians are faced with an ethical dilemma.

This underlines the importance of understanding the animal-human bond. Hopefully, new approaches and solutions to the ethical dilemma will emerge from the findings of this study.

References

Kuckartz, U. and Rädiker, S. (2022). Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung, Beltz Juventa, Weinheim, Germany, 5th edition 2022, pp. 38-44

Packer, M.A., O'Neill, D., Fletcher, F. and Farnworth, M.J. (2020). Come for the looks, stay for the personality? A mixed methods investigation of reacquisition and owner recommendation of Bulldogs, French Bulldogs and Pugs, PLoS One 15(8).

Springer, S., Sandøe, P., Bøker Lund, T. and Grimm, H. (2019). "Patients' interests first, but ... " – Austrian Veterinarians' Attitudes to Moral Challenges in Modern Small Animal Practice. Animals, 9(241).

6. Do veterinarians have a duty to generate pain free animals?

S. Camenzind
Institute of Philosophy, University of Vienna, Vienna, Austria; samuel.camenzind@univie.ac.at

Distress, pain and suffering are central concepts in the realm of veterinary medicine. Not only are they mentioned in various guidelines and codes, but with anesthesia and analgesia, two fields of research have developed that are specifically dedicated to pain prevention, management and therapies in animals. The prevention of pain and its treatment should not only be considered from a medical-technical point of view, but it also functions as a moral imperative.

This is visible, for example, in the context of animal experimentation and the 3Rs Principles (Russel and Burch, 1959), whose Refinement Principle calls not only for avoiding pain wherever possible, but also for choosing the animal species in an experiment that is believed to be least sensitive to pain. This rule is implicit also present in § 6. (1, no. 9) of the Austrian Animal Research Act (Tierversuchsgesetz), where it is stated, that research is only permitted on animals who possess the least capacity to experience pain, suffering or stress (see also Nuffield Council on Bioethics (NCB), 2005: 61).

Regarding the code of conduct "codex veterinaries" from the Veterinary Association for Animal Welfare (Tierärztlichen Vereinigung für Tierschutz, (TVT)) it is demanded of the members that "[f]rom an ethical point of view, the requirement for veterinarians is, that when animals are kept and instrumentalised, they are entitled not only to freedom from pain and suffering, but also to the presence of well-being" (TVT, 2009:3; S.C. trans.; see also the guidelines from the Royal Society for the Prevention of Cruelty to Animals (RSPCA) 2023 or World Veterinary Association (WVA) 2023). And with regard of laboratory animals, it is stated, that researchers must ensure that strains must be avoided by taking appropriate measures to prevent or reduce the pain (see TVT 2009: 13). Below the line the daily veterinary practice of pain prevention and reduction, is supported by claims on different normative levels, such as individual moral beliefs, code of conducts and legal regulations.

Against this background the renaissance of an older idea comes in to play. Since the emerge of the first wave of genetic engineering in the 1980s and 1990s the idea of altering research animals and livestock by genetically disenhance and reduce their pain experience has been discussed. Now within the second wave of genetic engineering and the advent of genome editing techniques around 2010 scientists and ethicists announce genetically modified pain free animal in foreseeable future. Actually, GPD is of great scientific, ethical and legal interest and it is currently being discussed in national ethics committees and within socio-political debates (CiWF, 2019).

What would it mean if it were possible to genetically modify animals so that they could continue to be sentient but no longer experience pain? Wouldn't veterinarians have a duty to breed such animals - at least in the areas of

livestock breeding and animal experimentation, where animals are systematically exposed to stress, pain and suffering? The following contribution intends to explore these two questions and contextualize current trends in Genetic Pain Disenhancement (GPD) research in the field of veterinary medicine.

In a first step, the basic idea of GPD is presented, and put into the current debate, which has gained a new momentum with the advent of genome editing techniques and the hope (or fear) to breed GPD animals. Afterwards, pro and con arguments as well as open questions will be discussed whether veterinarians have a duty to breed GPD animals. It will be shown, that although veterinarians have a prima facie duty to minimize pain and suffering, GPD is based on a specific ethical theory and involves several descriptive and normative assumptions, which veterinarians do not necessarily have to advocate and which may even conflict with veterinary code of conducts.

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References

Compassion in World Farming (CiWF) (2019). Report "Gene-Edited Animals in Agriculture". Roundtable 18.6.2019, London. Available at: https://abiggerconversation.org/wp-content/uploads/2019/09/Gene-edited-Animals-in- Agriculture-Roundtable-Report_27-Aug-2019_Final.pdf. Accessed 15 May 2023.

Nuffield Council on Bioethics (NCB) 2005. The Ethics of Research Involving Animals. Available at: https://www.nuffieldbioethics.org/wp-content/uploads/The-ethics-of-research-involving-animals-full-report.pdf. Accessed 21 June 2023

Royal Society for the Prevention of Cruelty to Animals (RSPCA). Strategy to 2030. Available at: http://www.rspca.org.uk/whatwedo/strategy. Accessed 21 June 2023.

Tierärztlichen Vereinigung für Tierschutz e. V. (TVT) (2009). Codex Veterinarius. Ethische Leitsätze für tierärztliches Handeln zum Wohl und Schutz der Tiere. Available at: http://www.tierschutz-tvt.de/fileadmin/user_upload/TVT-CODEX_VETERINARIUS.pdf. Accessed 21 June 2023.

Russell, W.M.S. and Burch, R. (1959). The Principles of Humane Experimental Technique. Methuen: London, UK.

World Veterinary Association (WVA) (2023). Policies: Animal Welfare. Available at: https://worldvet.org/policies-category/animal-welfare/. Accessed 21 June 2023.

Section 3

Ethical dilemmas and moral stress in the veterinary profession

7. Ethical dilemmas encountered by small animal veterinarians

B. Kipperman
School of Veterinary Medicine, University of California at Davis, Davis, CA, USA; bskipperman@ucdavis.edu

Background
Ethical dilemmas arise when there are competing interests of equal moral weight and there is no obvious way to prioritise one responsibility over others (Morgan and McDonald, 2007). One of the most fundamental ethical problems in veterinary practice is whether veterinarians should give primary consideration to the animal or to the client/animal owner. Rollin (2006) proposed two models of veterinarians: the pediatrician model characterized by patient advocacy, and the model of the mechanic, beholden to client requests regarding the disposition of their legal property.

It is assumed by animal owners and by society that veterinarians are advocates for animals. The reputation of the veterinary profession is inherently connected to its consideration and treatment of animals. Yet veterinarians are hired and paid by humans, not animals. Organizational codes of conduct in the US do not provide guidance regarding how to prioritize satisfying the interests of animals, pet owners and the veterinarian, and the dearth of ethics instruction in training programs (Shivley *et al.*, 2016) provide little direction to veterinarians in navigating ethical conflicts.

Moral stress is a unique type of angst experienced by veterinarians because of ethical dilemmas defined as: "A sense of discord and tension between what one is, in fact, doing, and one's reason for choosing that field, between what one feels ought to be and what one feels oneself to be, between ideal and reality" (Rollin, 2011). Moral stress is therefore understood as the outcome of experienced conflicts between work-related requirements or expectations that do not conform to one's values.

This lecture will discuss results of a survey-based study to examine the frequency with which ethical dilemmas between client and patient interests occur in veterinary practice, identify some of the common circumstances that cause ethical dilemmas, determine the degree of moral stress elicited by these conditions, characterize the views of practitioners regarding euthanasia decisions, determine which interest veterinarians prioritize when client and patient interests conflict, and assess measures that might reduce the detrimental impacts of ethical dilemmas.

Materials and Methods
A link to the survey was distributed to members of the California Veterinary Medical Association, the Humane Society Veterinary Medical Association, the Society for Veterinary Medical Ethics, and small animal specialists of the American College of Veterinary Internal Medicine. Responses to survey

questions were tabulated and descriptive statistics (number and percentage) were generated.

Results

Results were published in the Veterinary Record (Kipperman *et al.*, 2018). Of the 484 respondents, 33% identified themselves as practice owners and 67% identified themselves as associate or relief veterinarians; 80% were female and 20% were male. The median number of years in practice for the respondents was twenty.

The majority (52%) of small animal veterinarians in the USA indicated experiencing an ethical dilemma regarding the interests of clients and those of their patients at least weekly, with 19% reporting encountering ethical dilemmas at least daily. Among the clinical scenarios provided, the two most common dilemmas respondents encountered included client financial limitations compromising patient care and having to perform therapeutic trials instead of diagnostic testing because of costs or owner preference, with a median response for both of a few times a week.

More respondents in the present survey agreed (45%) than disagreed (37%) that veterinarians use euthanasia as an aid or method to resolve difficult cases when this may not be in the best interest of the patient, and 42% of practitioners reported that they had done this at least once in their career.

While only 17% of respondents indicated that other practitioners prioritise patient interests, 50% of respondents characterised their own behaviour as prioritising patients. These findings raise questions regarding whether the majority of small animal veterinarians in the USA see their professional role as primarily advocates for animals.

Most respondents (52%) reported that ethical dilemmas are the leading cause, or are one of many equal causes, of work-related stress. Most respondents in the present survey characterised almost all clinical scenarios associated with client economic limitations as causing at least a moderate degree of moral stress; 61% of respondents indicated moderate to very high stress when faced with economic limitations compromising patient care. Higher levels of stress were reported to be associated with economic euthanasia, as 73% of respondents reported moderate to very high stress associated with euthanasia requests believed to be due to lack of financial means, and 80% of respondents indicated moderate to very high stress associated with circumstances where euthanasia was requested because the practitioner believed that the client was unwilling to pay for treatment.

Only 51% of practitioners reported receiving any ethics training in veterinary school, and 39% of respondents who had received ethics instruction agreed that such training prepared them to address ethical dilemmas. These findings suggest a need for future studies to further explore veterinarians' opinions about ethics training.

Conclusions

Most small animal veterinarians experience ethical dilemmas regularly which contribute to moral stress. Moral stress from ethical fatigue and lack of consensus regarding animal advocacy among small animal veterinarians may have detrimental consequences for animal welfare. Results suggested that most small animal practitioners believe that greater awareness of moral stress and providing training in ethics and tools for coping with ethical dilemmas can ameliorate moral stress. Based on the results of this study, concerted efforts to educate veterinary students and veterinarians about ethical dilemmas unique to the profession and their roles as animal advocates are warranted and may help to mitigate one of the major causes of moral stress.

References

Kipperman, B., Morris, P. and Rollin, B. (2018). Ethical dilemmas encountered by small animal veterinarians: characterisation, responses, consequences and beliefs regarding euthanasia. Veterinary Record, 182(19): 548.

Morgan, C.A. and McDonald, D. (2007). Ethical dilemmas in veterinary medicine. Veterinary Clinics Small Animal, 37: 165-179.

Rollin, B.E. (2006). An Introduction to Veterinary Medical Ethics. 2nd ed. Ames, IA; Blackwell Publishing.

Rollin, B.E. (2011). Euthanasia, moral stress, and chronic illness in veterinary medicine. Veterinary Clinics of North America-Small Animal Practice, 41(3): 651-659.

Shivley, C.B., Garry, F.B., Kogan, L.R. et al. (2016). Survey of animal welfare, animal behavior, and animal ethics courses in the curricula of AVMA Council on Education-accredited veterinary colleges and schools. Journal of the American Veterinary Medical Association, 248(10): 1165-1170.

8. Experience with futility contributes to moral distress in veterinary technicians in North America

N. Peterson[1], K. Foltz[2], J. Boyd[3,4] and L. Moses[3,5,6]*
[1]Department of Clinical Sciences – Emergency and Critical Care Section, Cornell University College of Veterinary Medicine, Ithaca, USA; [2]BluePearl Veterinary Partners. Tampa, USA; [3]Center for Bioethics, Harvard Medical School, Boston, USA; [4]Psychiatry and Medical Ethics, Baylor College of Medicine, Houston, USA; [5]Faculty of Medicine, Case Western Reserve University, Cleveland, USA; [6]Interdisciplinary Center for Bioethics, Yale University, New Haven, USA; nwp26@cornell.edu

Background and current context
Moral distress is well documented in human Intensive Care nurses providing futile treatment to patients. Because veterinary technicians (VT) in North America are also immediate care providers and operate under the same hierarchical constraints it is possible they also experience moral distress similarly. While there is some empirical evidence about the impact of futile treatment as it relates to veterinarians (Moses *et al.*, 2018; Peterson *et al.*, 2022) no work has been done to evaluate the effects on other veterinary care providers (i.e., veterinary technicians/veterinary nurses, and assistants). It is probable that the impact of providing futile treatment is at least as significant on them as it is on veterinarians because they are in frequent and direct contact with the patients receiving care and are often, if not always, responsible for the actual provision of care.
Veterinary medicine is experiencing a severe shortage of veterinary technicians (NAVTA, 2016). Attrition of credentialed VT from the profession, in North America, has emerged as a limiting factor in the ability to provide veterinary services, and low technician staffing levels have forced clinics to alter operations causing many emergency and advanced care facilities to divert cases. To date VT experiences with futile care and associated moral distress have not been examined. This study aimed to document these experiences, their causes, and their consequences.

Materials and Methods
Survey
A cross-sectional study using a 56-question, web-based, confidential, and anonymous survey distributed through the National Association of Veterinary Technicians in America (NAVTA) was conducted. The survey was comprised of both quantitative and qualitative questions and was open from 19 January 2023, to 15 February 2023. Skip logic was used in the survey so the number of answers for each question was variable. Survey questions attempted to elucidate how VT define futility, how they experience futility, and how these experiences affect them both professionally and personally. In total 1944 VTs responded and 64% completed all questions.

Results

Defining and encountering futility

When asked to define futility in veterinary medicine 59.9% of VT felt futility was the continuation of treatments that were expected to lead to either uncontrollable suffering or when the patient's prognosis was permanent suffering, pain, distress, or disability. Nearly 1/3 (30.8%) felt futility was the continuation of current treatments or the implementation of new treatments that were not expected to alter the clinical course of the patient, even if the treatment conferred some unexplained benefit to the owner. In fact, 65.4% of respondents felt that treatments they believed were futile provided some benefit to pet owners. Nearly all respondents (97.8%) reported having witnessed futile care during their careers and 94.7% reported having provided futile care.

Experience and impact of providing futile treatments

Most respondents (85.8%) had moral concerns about providing futile treatments and (83.7%) reported having been asked or directed to act against their conscience in providing futile treatment to terminally ill patients; 80.8% provided such treatment. Adverse symptoms of stress were common with 96.6% and 83.4% of respondents reporting they had experienced negative emotional or physical responses respectively. Troublingly, 41% of VT reported self-medicating with drugs or alcohol and 8.1% reported they had considered or attempted self-harm as a result.

A relationship was noted between futile care and potential attrition, with 48.6% of respondents reporting that they had considered leaving their position in part due to moral distress associated with futile treatments while 55.4% said they have first-hand knowledge of a colleague who had consequently left the profession. Most respondents (71.6%) reported that participating in futile treatment negatively affected their morale or job satisfaction.

Discussion and future directions

Like prior work of the authors the current study confirmed that treatments believed to be futile by VT are common, and that a lack of consensus exists when attempting to define futility in veterinary medicine (Peterson *et al.*, 2022). A majority of VT believed that futility was characterised by patient suffering, but a sizable minority preferred a definition centred on the inability of a treatment to alter the expected clinical outcome. The ratios of these answers are nearly perfectly reversed for veterinarians defining futility (Peterson *et al.*, 2022). This difference between veterinarians' beliefs and technicians' beliefs about futility may reflect different values structures for people choosing to become veterinarians versus those choosing to pursue a more direct patient care career such as veterinary technology. This difference in defining futility could lead to misunderstanding and conflict and highlights the need to seek consensus on a definition to facilitate further research and to develop frameworks for professional dialogue.

Our results suggest that providing futile care to pets causes significant moral distress among VT. One likely factor is the frequency with which they are asked to, and in fact do, act against their conscience. An astonishing 80% of VT had acted against their conscience when providing futile treatments, which does not compare favourably to human medicine in which Solomon et al. found an also unacceptably large percentage (70%) of house officers had acted against their conscience when providing treatment to terminally ill people. When people compromise their morals by acting against their conscience moral residue accumulates, leading to an ever-increasing baseline of moral distress in what has been called the crescendo effect (Epstein and Hamric, 2009). Over time this accumulated moral residue can lead to burnout. The veterinary profession is experiencing a mental health crisis and the finding of both adverse emotional and physical symptoms, and of self-destructive behaviours, identified in the current study, should be cause for alarm (Nett *et al.*, 2015).

Mitigating the repercussions of participating in futile treatment requires urgent attention. The veterinary profession must engage with VT about addressing futility concerns. Screening tools for moral distress are desperately needed and should be coupled with the facilitation of access to mental health care for any member of the care team when needed. Continued investigation into the relationship between futile treatments and their possible contribution to the current VT labour shortage is required. Ultimately a framework for alleviating moral distress must be developed to protect VT during the provision of treatments to terminally ill pets.

References

Epstein, E.G. and Hamric, A.B. (2009). Moral distress, moral residue, and the crescendo effect. The Journal of Clinical Ethics, 4: 330-342.

Moses, L., Malowney, M.J. and Boyd, J.W. (2018). Ethical conflict and moral distress in veterinary practice: A survey of North American veterinarians. Journal of Veterinary Internal Medicine, 32: 2115-2122.

National Association of Veterinary Technicians in America – NAVTA (2016). Demographics survey results. Available at https://cdn.ymaws.com/navta.site-ym.com/resource/resmgr/docs/2016_demographic_results.pdf. Accessed 18 May 2023.

Nett, R.J., Witte, T.K., Holzbauer, S.M., Elchos, B.L., Campagnolo, E.R., Musgrave, K.J., Carter, K.K., Kurkjian, K.M., Vanicek, C.F., O'Leary, D.R., Pride, K.R. and Funk, R.H. (2015). Risk factors for suicide, attitudes toward mental illness, and practice-related stressors among US veterinarians. Journal of the American Veterinary Medical Association, 247(8): 945-955.

Peterson, N.W., Boyd, J.W. and Moses, L. (2022). Medical futility is commonly encountered in small animal clinal practice. Journal of the American Veterinary Medical Association, 260(12): 1475-1481.

9. Swedish vet-students' perception of animals, responsibility and reasons for moral stress

*A. Orrenius and H. Röcklinsberg**
Department of Animal environment and health, Swedish University of Agricultural Sciences, Uppsala, Sweden; Helena.Rocklinsberg@slu.se

There is currently a lack of veterinary clinicians in Sweden leading to risk of increased suffering for animals due to e.g. long distances to veterinary care in remote areas and restricted opening hours for clinics and animal hospitals. This is both caused by and leads to high work load and stressful working environment among the veterinary staff. Studies and statistics show an increased level of sick leave, part time work (to reduce hours to 'only' a full working week) and decreased mental health (in the veterinary profession) (Gröna arbetsgivare, 2019). A governmental decision from 2021 established that the number of veterinary students accepted annually will increase from 100 to 150, starting in 2023, in an attempt to secure future availability of veterinary care (SOU 2022:58, 2022). However, that veterinarians suffer from moral stress due to clashes between their daily practice and personal values is well known (Rollin, 2011; Stoewen, 2019; Stoewen, 2020), and we argue that merely increasing the number of veterinarians will not solve the situation. Rather, the limited ethical training during education and factors related to mental health issues, such as moral stress, need to be highlighted and handled to improve the working environment (Muir and Van den Brink, 2020).

Survey to vet-students
In order to shed some light on the perception of factors related to moral stress among future veterinarians' we conducted a study on veterinary students' attitudes towards animals, their view on veterinarians' ethical responsibility, and on moral stress. One purpose of the study was to investigate whether there is a difference between first year students and fifth year students in the (single) veterinary program in Sweden, another to investigate whether students with a certain type of attitudes towards animals see the ethical responsibility and moral stress differently from students with another attitudes towards animals.

A web survey was sent to first year and fifth year students (105 first year students and 94 fifth year students) in the veterinary program during the spring of 2023. The survey was divided into three sections with questions about 1) attitudes towards animals, 2) the veterinarians' ethical responsibility, and 3) moral stress. The survey was open for 17 days and was fully answered by a total of 55 people (25 people in the first year and 30 people in the fifth year). However, more answers are reported for some questions because 77 students started the survey but dropped out along the way. Although results are hence to be taken with caution due to the low response rate, they still give insight to interesting correlations in respondents' views.

In the first section one question asked the student to grade the value of different animal species typically used for companionship or food production

(hen, pig, cow, dog and horse) on a scale from 1 to 10, where a human was considered to have a value of 10.

Values set on animals, expectations of moral stress and veterinarian responsibility

Students who rated the hen low on the scale (1-5) made a greater distinction between pets and farm animals in questions regarding clinical treatment later in the survey. This difference between pets and farm animals was not seen in those who rated the hen higher on the scale (9-10). The study also highlights differences concerning how attitudes towards animals affect the experience of moral stress. Students who valued the hen higher experience more factors as morally stressful than those who valued the hen lower.

Regarding the veterinarian's ethical responsibility, nearly everyone responded that the veterinarian's responsibility applies to individual animals for both pets and farm animals. But, according to responses on questions regarding priorities in clinical treatment, many students, especially the students who valued the hen low, were more inclined to fulfil the animal owners wishes regarding farm animals compared to pets.

Further, this study showed that fifth year students do not experience euthanizing a healthy animal as morally stressful as first year students do. At the same time, first year students experience continued treatment of an animal with low welfare or an animal they recommended euthanasia as less morally stressful than fifth year students. Views mapped in previous research as factors related to moral stress (convenience euthanasia of a healthy animal, continue treatment despite compromised animal welfare/quality of life, financial limitations on treatment) were shown to be relevant also in this study. An additional factor for moral stress found in this study was that not being able to spend as much time as desired with each patient was regarded morally stressful. Six first year students (30%) and eight fifth years students (30%) indicated that moral stress was a contributing factor for potentially not remaining in clinical veterinary practice throughout their careers.

Conclusion

This study sheds light of core values affecting the perception of individual differences in causes for moral stress, and differences between students of year one and five. We found a correlation between concerns for individual animals (regardless of its societal function), view of responsibility and the expectation to experience moral stress. The result mirrors a division between two groups of students: those valuing hens high, taking responsibility for individual animals independent of species and envisaging a risk for experiencing moral stress, and those doing that to a distinctly lower degree. This reveals both a potential division among students' values, and a need for further studies of veterinarians' value patterns. Further, in order to limit risks for moral stress in clinical work, acknowledging these differences and respect for influence of value dimensions on the perceived working environment is required, not least given the societal differences in how animals are valued and welfare challenges

in todays' farming. Hence, a part of the solutions to dropouts from the clinics might lie in increased respect for ethical differences as well as time for elaboration and discussion of values and perceptions both among veterinarians and on a societal level.

References

Gröna arbetsgivare (2019). Svensk Djursjukvård Branschrapport 2019. Available at: https://www.grona.org/imagevault/publishedmedia/sh8i5fbp516mgbbe0lzo/Svensk_Djursjukvard_branschrapport_2019_webb.pdf?download=0. Accessed May 23 2023.

Rollin, B. (2011). Euthanasia, moral stress, and chronic illness in veterinary medicine. Veterinary Clinics of North America: Small Animal Practice. 41(3): 651-659.

SOU (2022:58). Utredningen om en hållbar och långsiktigt välfungerande hälso- och sjukvård för djur (2022). *Bättre förutsättningar inom djurens hälso- och sjukvård.* Stockholm: Landsbygds- och infrastrukturdepartementet. Available at: https://www.regeringen.se/contentassets/5a0e209dcee242b6b2a86983c87372c3/sou-2022_58.pdf. Accessed May 23 2023.

Stoewen, D.L. (2019). Moving from compassion fatigue to compassion resilience. Part 1: Compassion - A health care priority, core value, and ethical imperative. The Canadian Veterinary Journal, 60(7): 783-784; Part 2: Understanding compassion fatigue. The Canadian Veterinary Journal, 60(9): 1004-1006.

Stoewen, D.L. (2020). Moving from compassion fatigue to compassion resilience. Part 3: Causes of compassion fatigue. The Canadian Veterinary Journal, 61(4): 427-429; Part 4: Signs and consequences of compassion fatigue. The Canadian Veterinary Journal, 61(11): 1207-1209.

Section 4

Professional ethics in food production

10. Veterinary Medicine and the Concept of Dirty Work

C. Dürnberger
Unit of Ethics and Human-Animal Studies, Messerli Research Institute, University of Veterinary Medicine, Vienna, Austria; Christian.duernberger@vetmeduni.ac.at

Idea of the Project
The talk will outline a project idea and therefore only presents a hypothesis, but not yet empirical data. It is planned to implement the project idea from the fall of 2023. It will be funded by the Austrian Science Fund (FWF). The talk will focus on the theoretical concept of 'Dirty work' and argue that this concept can help us to better understand the social embedding of certain veterinary work.

The talk proposes that occupations in a slaughterhouse fulfil central criteria of the concept of 'dirty work' – with veterinary work representing a special case that has not been investigated so far. Occupations have different reputations. Some are perceived as prestigious and honourable; others are regarded less well. Hughes (1958) brought the second category into the focus of scientific research by coining the term 'dirty work' (from now on: DW). DW can be defined as an occupation of low prestige that is likely to be perceived as degrading or disgusting, or simply as a job that people prefer not to talk about, or whose activities they prefer not to witness (Ashforth and Kreiner, 1999). DW is not only often executed by those with few other possibilities, for example by 'lower classes' and marginalized groups; people who do such work also experience a kind of stigmatization that has been called 'taint' by previous research (Ashforth und Kreiner, 1999). DW can leave different kinds of taint on its performers (see Table 1). Table 1 also gives examples that have been identified in the research literature as exemplary DW.

Table 1. Three dimensions of dirty work following Hughes (1958) and Ashforth and Kreiner (2013)

Dimension	DW: Occupations that are...	Examples
Physical taint	... associated with dirt, stench, death, or waste. The work is often perceived as disgusting and nauseating, leading to feelings of repulsion	Sewer workers, morticians, butchers
Social taint	... stigmatized as "dirty" as its performers are in regular contact with people from other stigmatized groups, or as the job is associated with servile relationships	Working with alcoholics, mentally ill people, criminals, or working as sex workers
Moral taint	... judged as immoral, violating social norms, and associated with dubious virtues	Pimps, executioners

The talk is guided by the following general hypothesis: Veterinary work in a slaughterhouse must be classified as DW, more precisely as 'pervasive taint' (Kreiner *et al.*, 2006), meaning that all three forms of taint are present: (a) Physical taint: Slaughtering animals has to do with dead bodies, stench, blood, viscera and death. (b) Social taint: Work is often done by migrants or "lower classes". Furthermore, slaughter animals can be understood as a social group with low prestige (Sebastian, 2021). (c) Moral taint: Killing of animals is perceived more and more as immoral and offensive; at least consumers –

including meat eaters – avoid confrontation with the systematic slaughtering/killing of animals.

Despite this assumed triple stigmatization, there is relatively little research on slaughterhouse work in the context of DW; the few exceptions focus on 'common' slaughterhouse workers rather than on veterinarians. However, veterinary medicine adds a significant new dimension to the whole discussion: Veterinarians are not associated with 'lower class', 'few alternatives', or 'marginalised group'; on the contrary, their profession is generally considered prestigious and is associated with 'helping the weak and sick'. A veterinarian working at a slaughterhouse does not fit into this common conception: instead of caring and healing, his or her work is (not only, but also) about blood, viscera and carcasses. Veterinarians working at the slaughterhouse thus participate in two worlds: their job can be described as DW – but within the context of a 'shiny' profession. Against this background, veterinarians at the slaughterhouse can be expected to develop specific strategies to deal with potential physical, social and moral stigmatization. These strategies and in particular the integration of their work at the slaughterhouse into their 'professional identity' will be explored in detail in the project (see also "methods"). In doing so, the project will not only advance the emerging discipline of veterinary ethics but will also provide empirical data on a crucial group in current food supply and decisively deepen the concept of DW.

Main research questions

The project will gather and discuss data in the light of three essential, superordinate research questions: (a) To what extent do veterinarians working in slaughterhouses experience their work as physically, socially and/or morally stigmatized? (b) Which coping strategies help veterinarians working in a slaughterhouse to deal with (potential) stigmatization? (c) To what extent and in which way do veterinarians working at the slaughterhouse integrate their work into their professional identity as a veterinarian?

Methods

The project will conduct an empirical investigation among veterinarians. It will apply a mixed methods approach with a qualitative focus. 20 problem-centred interviews with veterinarians working in a slaughterhouse will be the focus of the empirical investigation. Examination of the extent to which veterinary work in the slaughterhouse can be described as DW is greatly enhanced by contrasting it with other veterinary work settings. Therefore, the project will also conduct interviews with veterinarians from other contexts of veterinary medicine. Finally, based on the results of the qualitative interviews, the project will generate hypotheses on potential stigmatization experiences, coping strategies, and the professional identity of veterinary work in slaughterhouses and test them representatively on (other) veterinarians working in slaughterhouses.

References

Ashforth, B.E. and Kreiner, G.E. (1999). 'How can you do it?': Dirty work and the challenge of constructing a positive identity. Academy of Management Review, 24(3): 413-434.

Ashforth, B.E. and Kreiner, G.E. (2013). Dirty Work and Dirtier Work: Differences in Countering Physical, Social, and Moral Stigma. Management and Organization Review, 10(1): 81-108.

Hughes, E. (1958). Men and their Work. Glencoe, IL: The Free Press, pp. 49-50.

Kreiner, G.E., Ashforth, B.E. and Sluss, D.M. (2006). Identity dynamics in occupational dirty work: Integrating social identity and system justification perspectives. Organization Science, 17(5): 619-636.

Sebastian, M. (2021). Die denken immer, man ist ein Killer – Reaktionsweisen von Schlachthofarbeitern auf moralische Stigmatisierung. Österreichische Zeitschrift für Soziologie, 46: 207-227.

Funding

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11. Herd as patient – Professional Ethics in Veterinary Herd Health Management

J. Karg
Unit of Ethics and Human-Animal Studies, Messerli Research Institute, University of Veterinary Medicine, Vienna, Austria; Johanna.karg@vetmeduni.ac.at

Introduction
In recent decades, European livestock farming has developed from small-scale farming structures to steadily increasing farm and herd sizes. This also had an impact on the affiliated veterinary profession: In large livestock farms, especially in the poultry and pig sector, the medical care of the animals is nowadays mainly organised through veterinary Herd Health Management (HHM). HHM focuses on the overall improvement of the herd's health. With the main goal of preventing diseases in the herd, care for the individual animal becomes a "concurrent responsibility" (Ramirez *et al.*, 2016:3), since time and money in livestock is limited. This field of veterinary medicine thus differs substantially from other fields where the individual patient and it's wellbeing is in the centre of veterinary decision-making processes. What challenges arise in practice, when the focus shift from one individual to a group of a hundred or a thousand of animals? How else should veterinary medicine be guided, if not by the interests of the individual patient?

Veterinary Ethics and Herd Health Management
The key component of veterinary HHM is to move between individual animals and a group entity: the herd. One of the biggest challenges in developing a professional ethics of HHM is the conceptualization of a herd as a proper object of moral concern. This becomes even more challenging as veterinary ethics "has been largely dominated by individualist animal ethics, in part because of the emphasis on patients and professional duties in a clinical context" (Nieuwland and Meijboom, 2019).

For this reason, some models and tools used in veterinary ethics to describe and address moral problems cannot accurately be applied to the practice of HHM. The complex relationships in veterinary practice between veterinarian, animal and animal owner are usually illustrated in the triad model according to Yeates (2013a) depicted below. The triad identifies the key actors considered in ethical decision-making and illustrates their relationships to each other. With the herd as an additional party, a new network of relationships emerges in the field of veterinary HHM. The following links seem to be morally significant in this network: (1) the link between the veterinarian and the herd, (2) the link between the farmer and the herd and (3) the link between one individual animal and the herd. In each of these connections there is new potential for conflict, as interests may diverge. To accurately describe ethical challenges in HHM practice the triad must therefore be extended by an additional component, that of the herd, and transformed into a tetrad. The following is a visualisation of this transformation, the noncontinuous lines highlight the new relationships to be explored in this project:

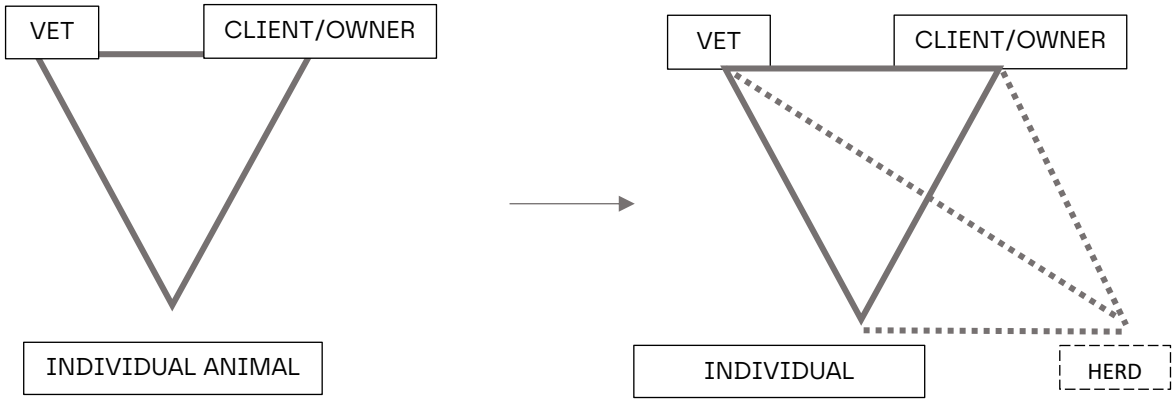

Figure 1. The Tetrad of HHM: transformation of the triad of ethical conflicts in veterinary medicine according to Yeates (2013a:3) into a tetrad

Adding the Herd: Identifying moral challenges in Herd Health Management

The new constellation of involved parties shown in the graph calls for an intensive ethical evaluation of HHM practice. Veterinarians need to be equipped with ethical tools for those cases where individual and herd interests are not compatible, for example during epidemics where individual diseased animals pose a risk to the group or even the whole herd. In the past, this has often been used as a justification for killing affected animals. Also, where one animal shows aggressive behaviour like tail biting or feather pecking towards others, injury therapy and prevention provides for measures that are not always in the best interests of the individual animal. To address these issues, it is worth looking at theories beyond veterinary ethics: approaches from conservation and environmental ethics and how to deal with wild individual animals within a population may provide interesting insights for the development of a HHM professional ethics. There are also papers from animal welfare science and ethics on how to deal with and evaluate non-individual approaches in the assessment of animal health and welfare (i.a. Yeates, 2013b). However, those require adaptation to the clinical context of HHM practice. Veterinarians who encounter these moral challenges in the course of their curative practice need ethical tools that are aligned with the norms and values of their profession.

Also, the ever-present financial pressure in veterinary medicine, but especially in farm animal medicine, will influence clinical decisions in HHM: Not the health interests of the animal patient as an end orient farm animal veterinary treatment, but the "functionality and economic prosperity" of an animal and "the health of the animal becomes a means to other ends, such as efficient production" (Springer and Grimm, 2022:483). How to deal with the financial burden has been well elaborated in veterinary ethics (i.a. Kondrup *et al.*, 2016). In HHM practice though there is the potential for the problem to be exacerbated due to even closer cooperation between veterinarian and farmer on the basis of veterinary service contracts.

Conclusion

A professional ethic is expected to respond to the specific conditions and requirements of a profession. These conditions vary enormously in veterinary medicine. Explicitly addressing the respective context is therefore indispensable for professional veterinary ethics to be applicable in practice. To gain a deeper understanding on the HHM context and the involved moral challenges, empirical research and interviews with veterinarians practising in this field may be inevitable. The empirical results may also serve to test the methods that veterinary ethics and related research fields offer to meet the challenges in HHM practice. The aim of this research project should be to reflect on and develop an initial normative framework that guides veterinarians through decision-making-processes in Herd Health Management.

References

Kondrup, S.V., Anhøj, K.P., Rødsgaard-Rosenbeck, C., Lund, T.B., Nissen, M. H. and Sandøe, P. (2016). Veterinarian's dilemma: a study of how Danish small animal practitioners handle financially limited clients. Veterinary Record, 179(23): 596-596.

Nieuwland, J. and Meijboom, F.L.B. (2020). One Health: How interdependence enriches veterinary ethics education. Animals, 10(1): 13.

Ramirez, A. and Karriker, L.A. (2019). Herd Evaluation. In: Zimmerman J.J., Karriker L.A., Ramirez A., Schwartz K. J., Stevenson G. W. and Zhang J. (eds.): Diseases of swine, Hoboken, NJ: Wiley Blackwell, pp. 3-16.

Springer, S. and Grimm, H. (2022). The Future of Veterinary Ethics: History, Diagnosis, and Prognosis of an Evolving Research Field. In: Kippermann, B. and Rollin, B.E. (eds.): Ethics in Veterinary Practice: Balancing Conflicting Interests. Hoboken, NJ: Wiley-Blackwell, pp. 481-500.

Yeates J. (2013a). Animal welfare in veterinary practice. Wiley-Blackwell.

Yeates, J.W. (2013b). Individualism and Nonindividualism in the Application of Nonhuman Animal Welfare to Policy, Journal of Applied Animal Welfare Science, 16(3): 254-271.

Section 5

Competencies, professional obligations and codes of conduct in the veterinary profession

12. Fraser's "practical" ethics as baseline for creation of competencies and skills for an interdisciplinary code of conduct

V. Ilieski
Animal Welfare Center; Department of Functional Morphology, Faculty of Veterinary Medicine, "Ss. Cyril and Methodius" University Skopje, North Macedonia; vilieski@fvm.ukim.edu.mk

There are various definitions that describe the veterinary professional codes of conduct as a platform where "the knowledge and skills of veterinarians need to be structured for the benefit of society, animal health and welfare, as well as to protect public and environmental health" (FVE, 2019).

From a veterinary perspective, the development of transdisciplinary skills and competencies should be incorporated into the veterinary Codes of conduct. Veterinary professional codes of conduct highlight the obligations of veterinarians to animals, clients, colleagues, as well as to the wider community. Veterinarians use their knowledge and skills for the benefit of society, to promote animal health and welfare and relieve suffering, protect public and environmental health and advance comparative medical knowledge. The One Welfare and One Health transdisciplinary concepts rely primarily on knowledge and skills based on understanding how animals' interests can be promoted alongside other important societal goals, such as food safety and environmental stewardship (Laing *et al.*, 2023) Veterinary practice is more than just an academic subject, it also requires professional competences, i.e. knowledge –skills –attitudes.

The veterinary profession is a profession regulated by EU legislation. Article 38 of Directive 2005/36/EC, as amended by Directive 2013/55/EU on the recognition of professional qualifications, lays out the skills, training and competences veterinarians should have. Furthermore, these standards should be incorporated into training programs. One Health and One welfare interdisciplinary education, nowadays, is still in the early stages of developments. Academia, in collaboration with different professions should develop One Health and One Welfare transdisciplinary competencies that can be incorporated across curricula in different disciplines. One Health and One Welfare core competencies should integrate knowledge, skills and attitudes, enabling a given professional to think and apply technical skills holistically. Establishing a list of One Health and One Welfare Day *One Competences* would help academic establishments, regardless of their discipline orientation, to identify the subjects in their curriculum where interdisciplinary training can be introduced as part of the teaching. However, an Interdisciplinary Code of conduct, nowadays, is still in the early stages of development. (Iatridou *et al.*, 2022).

There are no clear guidelines for One health and One Welfare skills and competencies. All recommendations are directed towards better cooperation,

better communication, as well as creation of networks between the different stakeholders.

Code of Conduct is a set of standards specifying the ethics and principles of the veterinary profession. In order to meet the interests of animals, humans and the environment, these concepts need to ensure common ethical thinking by veterinary surgeons in providing services and fulfilling professional norms. Veterinary ethics appears increasingly in veterinary curricula worldwide and is considered to be important by students, educators, and registration bodies, as reflected in the expected competencies. Fraser describes his “practical” ethics as a mid-level approach that is concerned with providing guidance for people, including veterinarians, in order to make ethical decisions with practical consequences (Fraser, 2012).

Fraser’s “practical” ethics should be seen in the future as a baseline for the creation of competencies and skills for an interdisciplinary Code of conduct. Frasers’s practical ethics consists of four principles that can be applied to any case, starting from the patient or patients in our care and broadening out to the environment or ecosystem: to provide good lives for the animals in our care; to treat suffering with compassion, to be mindful of unseen harm; and, to protect the life-sustaining processes and balances of nature (Fawcett *et al.*, 2018).

This approach requires the design of competencies not only from the animal’s point of view, but also from a human and environmental perspective. On the basis of the general principals of the Code of conduct, a list of core values can be transferred into Day One skills (Hernandez *et al.*, 2019). Fraser’s “practical” ethics should not address theoretical questions, but only practical solutions from a One health and One Welfare perspective. One Health and One Welfare in daily practice requires a complete change in the approach of professionals in all phases of biomedical practice, (i.e., observation, examination, diagnosis, prevention, control, treatment, research, and response). Interprofessional teaching should facilitate a more horizontal integration in teaching by inspiring greater openness to promoting interdisciplinary collaboration during professional life.

For the successful development of a Code of practice, there is a need to identify the primary objectives of One Health and One Welfare veterinary education in a broad societal context. There is a need for developing guidance on a common understanding and implementation of One Health in practice, as well as promoting interdisciplinary collaboration.

References

Iatridou, D., Bravo, A. and Saunders, J. (2022). One Health Interdisciplinary Collaboration in Veterinary Education Establishments in Europe: Mapping Implementation and Reflecting on Promotion. Journal of Veterinary Medical Education, 48(4).

Fawcett, A., Mullan, S. and McGreevy, P. (2018). Application of Fraser's "Practical" Ethic in Veterinary Practice, and Its Compatibility with a "One Welfare" Framework. Animals, 8(109).

FVE – European Code of Conduct (2019). Available at: https://fve.org/european-code-of-conduct-2019/. Accessed 20 July 2023.
Herten, J.V., Bovenkerk, B. and Verweij, M. (2019). One Health as a moral dilemma: Towards a socially responsible zoonotic disease control Zoonosis Public Health, 66, pp. 26-34.

Hernandez, E., Fawcett, A., Brouwer, E., Rau, J. and Turner, P.V. (2018). Speaking Up: Veterinary Ethical Responsibilities and Animal Welfare Issues in Everyday Practice. Animals, 8(15).

Laing *et al.* (2023). Advancing One Health: Updated core competencies. CABI One Health, https://doi.org/10.1079/cabionehealth.2023.0002.

Fraser, D.A. (2012). "Practical" Ethic for Animals. Journal of Agricultural and Environmental Ethics, 25, pp. 721-746.

13. Code of Ethics from Students for Students of the School of Veterinary Medicine at Freie Universität Berlin

C. Thöne-Reineke[1], L. Fischer-Tenhagen[2], S. Langforth[3] and D. Meemken[3]*
[1]Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science, School of Veterinary Medicine, Freie Universität Berlin, Germany; [2]German Federal Institute for Risk Assessment, Department Experimental Toxicology and ZEBET, Berlin, Germany; [3]Institute of Food Safety and Food Hygiene, Working Group Meat Hygiene, School of Veterinary Medicine, Freie Universität Berlin, Germany; Thoene-reineke.christa@fu-berlin.de

Background
The evolving human-animal relationship (Kompatscher, 2019), the increased social demands towards animal welfare and the high self- and externally imposed moral expectations of the veterinary profession lead to ethical challenges for both veterinarians and veterinary students that go beyond the legally defined framework (Thöne-Reineke *et al.*, 2020). The different roles of animals as pets or livestock render ethical considerations imperative. Veterinarians play a crucial role concerning animal welfare (Thöne-Reineke *et al.*, 2020). With their distinctive expertise and responsibilities towards animal wellbeing on the one hand, but also encountering human demands on the other hand, they are often challenged by complex ethical considerations (Kersebohm *et al.*, 2017).

Considering these challenges, the German veterinary association agreed to a code of ethics – the Codex Veterinarius for Veterinarians of the German Veterinary Medical Association (2015) and on recommendations for implementation of the "Code of Ethics of Veterinarians in Germany" (2015). The primary target group of these codes are veterinary practitioners. However, during their intern- and externships, even veterinary medical students may be confronted with situations in which animals experience unnecessary suffering and pain, such as in the curative field or in abattoirs. In order to provide the students with knowledge and skills to handle these situations well, a code of ethics was developed by students of veterinary medicine at the Freie Universität Berlin for their fellow students in an interactive interdisciplinary elective course.

Students' involvement
The course was organized and supervised by the Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science, the Institute of Food Safety and Food Hygiene (Working Group Meat Hygiene) and the Clinic for Animal Reproduction. Altogether, 10 students of the 6th semester took part in the course during the summer semester of 2021 with 14 teaching hours in total. Due to the corona pandemic, the course was implemented online. The course started out with an introduction of the participants which collected their ideas and expectations. Next, presentations of case studies encompassing the areas of a) veterinary training, b) farm visits and c) abattoir externships were

provided by members of the supervising institutes as an introduction to these three elected topics. The students were then divided into 3 groups of each 3-4 students and were asked to develop a code of ethics concerning the respective area, a guide for farm visits as well as reporting forms concerning suspected animal welfare violation under the guidance of the member of the respective institute. The above-mentioned codes of ethics served as templates and the following aspects were addressed: confidentiality agreement concerning third parties, corporate identity with the School of Veterinary Medicine, interaction with students and lecturers as well as dealing with topics relevant to animal welfare.

Outcomes

The final "Code of Ethics from Students for Students of the School of Veterinary Medicine at Freie Universität Berlin" consists of three parts: First, a general part with an ethics statement comprised ten points. In addition to this written format, it was incorporated into the interactive teaching and learning platform tet.folio for intramural teaching with case studies made available to students in online phases, together with a form for reporting suspected cases of animal welfare violations. The Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science with its animal welfare officers serves as contact.

Secondly, a decision tree for veterinary practice and farm visits was developed to guide students in cases of suspected animal welfare issues and to indicate a standardized and appropriate response. The students suggested it may be helpful to involve a more senior professional in the evaluation of the issue. Primary contact person is the veterinarian in charge at the respective externship facility or his or her experienced technical assistants. If agreed upon a possible welfare issue being present, an action plan was established, apart from life-threatening situations requiring immediate reaction. In case of animal suffering, severity has to be evaluated and appropriate actions are suggested.

Thirdly, a flyer with information relevant to animal welfare during stunning was developed in preparation for the abattoir externship. Animal welfare-relevant incidents at abattoirs were prepared in tet.folio using case studies. These are made available to students online in preparation of the abattoir externship, during which the students are familiarized with the recommended behaviour in case of suspected animal welfare violations. In addition, a reporting form was developed for cases in which the students may not receive sufficient support by the veterinarian in charge, in this case by the local official veterinarians. The form can be submitted to the Working Group Meat Hygiene of the Institute of Food Safety and Food Hygiene for further support and guidance. Since no form has been submitted to date, it can be assumed that potential cases of suspicion have all been resolved directly on site. Nevertheless, this tool serves as a safety measure for students during their externships.

The strong commitment of the students in this elective course should be particularly emphasized, as it has contributed considerably to the success of this code of ethics by students for students. This code of ethics was adopted

by the Faculty Council of the School of Veterinary Medicine at Freie Universität Berlin, published on the school´s homepage and will from now on be part of the curriculum of newly enrolled students in their first year.

References

Kersebohm, J.C., Lorenz, T., Becher, A. and Doherr, M.G. (2017). Factors related to work and life satisfaction of veterinary practitioners in Germany. Veterinary Record Open, 4: e000229.

Kompatscher, G. (2019). Mensch-Tier-Beziehungen im Licht der Human-Animal Studies. CC BY-NC-ND 3.0 DE, Available at: ¸https://www.bpb.de/themen/umwelt/bioethik/512039/mensch-tier-beziehungen/. Accessed 20 July 2023.

Thöne-Reineke, C., Grimm, H., Hartnack, S., Kunzmann, P. and Weich, K. (2020). Veterinärmedizinische Ethik in der universitären Lehre im deutschsprachigen Raum. BMTW Sonderheft Ethik, doi:10.2376/0005-9366-19064.

Codex Veterinarius for Veterinarians of the German Veterinary Medical Association (2015). Available at: https://www.tierschutz-tvt.de/ueber-die-tvt/ethische-grundsaetze/. Accessed 20 July 2023.

Code of Ethics of Veterinarians in Germany (2015). Available at: https://www.bundestieraerztekammer.de/btk/ethik/. Accessed 20 July 2023.

14. Balancing professional obligations and animal welfare: the ethics and legal framework surrounding reporting of animal neglect and abuse by veterinarians in Belgium

S. Aerts[1], L. Burgelman[1], P. Christiaenssen[1], C. De Ruyver[1], S. De Vliegher[1], C. Geutjens[1], A. Godfroid[1], T. Hendrickx[1,2], C. Landuyt[1], C. Moons[1], M. Van Cauteren[1], P. Weyens[1]*
[1]IRED, the Institute for Law and Ethics in Veterinary Medicine, Ghent University, Ghent, Belgium; [2]Sanimalia Animal Clinic, Hasselt, Belgium; Stef.Aerts@ugent.be

Regulation of the veterinary profession in Belgium
In Belgium, the veterinary profession is regulated based on the 'Act establishing the Order of Veterinarians' (Anonymous, 1950), together with a Deontological Code of Conduct which is drafted by the Federal Council of Veterinarians (Anonymous, 2015). We analyse whether veterinarians in the Flemish region, must always report cases of animal neglect and animal abuse, or whether they are bound by professional secrecy as outlined by Law and the Code of Conduct that prohibits them from doing so, and we formulate a proposal to create more legal certainty for veterinarians and to better protect animals.

The Act (Anonymous, 1950), Art. 5, §2 states veterinarians are deontologically obliged to observe secrecy in the exercise of or as a result of the exercise of the profession: 'The regional councils ensure compliance with veterinary ethics, the honour, honesty and dignity of and secrecy by the members of the Order in the exercise or further to the exercise of the profession, and even outside their professional activity in case of serious mistakes, which would have repercussions on the honour of the profession.' This is reflected in Art. 7 of the Code of Conduct (Anonymous, 2015): 'The veterinarian must treat the information entrusted to him confidentially, unless otherwise required by law.' On the other hand, that same Code, in Art. 15, states that the first duty of a veterinarian is to 'ensure the protection and welfare of the animals'.

Reporting animal welfare issues
Given the provisions in the Act and the Code, veterinarians cannot normally share information they obtain in the exercise of their profession, conflicting with their deontological duty to protect animals. Given the increasing public debates of these issues including the changing moral status of animals, the latter ethical provision carries more weight, and it can be expected that veterinarians will report suspected neglect and/or abuse of animals to the authorities (the Animal Welfare Department, police, etc.), as not reporting may lead to disciplinary action for failing to fulfill the obligation to ensure the welfare of animals.

For veterinarians too, professional secrecy applies under criminal law under Art. 458 of the Belgian Penal Code (Anonymous, 1867): '[...] all other persons who, by virtue of their state or profession, have knowledge of secrets entrusted to them and disclose them except when called upon to appear before a court [...] and, except where the law, decree or ordinance obliges or permits them to

disclose those secrets, shall be punished with imprisonment for one to three years and a fine of one hundred euros to one thousand euros or with one of those punishments alone.'

However, there are legal exceptions to professional secrecy:

- Art. 458bis of the Penal Code provides for a right (not an obligation) to report an exhaustive list of crimes against vulnerable groups (sexual crimes, crimes against children);
- Art. 422bis of the Penal Code provides for an obligation to act when inaction would amount to negligence (failing to help someone who is in grave danger);
- 'The state of emergency': the situation in which the violation of a legal provision, for example professional secrecy, is the only way to protect a more important social value.

This means there is no explicit exception for reporting animal neglect or abuse. Therefore, a veterinarian who violates professional secrecy by reporting such cases may suffer criminal prosecution.

Possible legal justifications for reporting animal welfare issues

We see at least three ways a veterinarian may *attempt* to justify the report legally:

- Arguing that Art. 458 of the Penal Code does not apply because it protects 'secrets' entrusted to the healthcare provider, whereas abuse is generally identified by a veterinarian rather than entrusted to him/her;
- Stating that the strict protection of professional secrecy makes less sense for veterinarians than for human healthcare providers as the concept of privacy does not apply to the individual in danger;
- Invoking the state of emergency and arguing that the protection of animal welfare must prevail in the present case. The Animal Welfare Act is subject to penal law, and is therefore a matter of public order.

Further ethical issues

It is also possible that veterinarians hide behind professional secrecy in order to protect their professional relationship with the animal owner and/or animal keeper and an associated income, and so evade their deontological duty to watch over the welfare of animals. This is also influenced by the fact that there are regular reports of veterinarians who are threatened by the owner or keeper involved, which makes them vulnerable in their professional practice and puts their deontological duty under pressure.

Protecting veterinarians better against this is therefore necessary and crucial for animal welfare, but also for the veterinarians' well-being. Anonymity and protection to the outside world must be guaranteed. In this context, when reporting to the police, it is possible to explicitly ask for anonymity. As a result, the police knows the name of the reporter but does not mention it in the official report. When a report is made to the Animal Welfare Department of the Flemish Government, discretion is guaranteed if explicitly requested.

Conclusion

We advocate a duty to report over a right to report for veterinarians who strongly suspect and/or detect neglect and/or abuse, based on the vulnerability of animals and the weaker professional secrecy *ratio legis* of veterinarians compared to humane caregivers. Veterinarians are often the only ones who can save the animal in such situations. Animal welfare must always take precedence over loyalty to the client.

Given the legal uncertainty for Flemish veterinarians, we call on the Flemish and Belgian legislator to provide clarity by establishing a deontological and penal-law exception to professional secrecy for cases involving animal neglect and animal abuse, i.e. an extension of Art. 458bis of the Penal Code.

References

Anonymous (1950). Wet tot instelling van de Orde der Dierenartsen [Act establishing the Order of Veterinarians]. December 19, 1950. BS 14-01-1951, p. 222. Available at: http://www.ejustice.just.fgov.be/eli/wet/1950/12/19/1950121902/justel. Accessed 28 April 2023.

Anonymous (1867). Strafwetboek [Penal Code]. June 8, 1867. BS 09-06-1867, p 3133. Available at: www.ejustice.just.fgov.be/eli/wet/1867/06/08/1867060850/justel8. Accessed 28 April 2023.

Nederlandstalige Gewestelijke Raad van de Orde der Dierenartsen (NGROD). (2015). Code der plichtenleer. Editie 2015. [Deontological Code. Edition 2015]. Available at: https://www.ordederdierenartsen.be/sites/default/files/public/Code2015.pdf. Accessed 28 April 2023.

Section 6

Veterinary ethics in practice: Professional work under the influence of technical and societal changes

15. Captured! On the use of patient cameras in veterinary practices and clinics in the Netherlands

M.F. Giersberg, D.K. Geijtenbeek and F.L.B. Meijboom*
Utrecht University, Faculty of Veterinary Medicine, Department Population Health Sciences, Unit Animals in Science and Society, the Netherlands; m.f.giersberg@uu.nl

Introduction
In human neonatal intensive care units, video visits have become popular. First studies indicate that allowing parents to view their babies remotely can positively impact their feeling of involvement and reduce their anxiety (Reimer *et al.*, 2021; Weber *et al.*, 2021). Browsing websites of veterinary practices and clinics shows that similar camera systems are entering the veterinary field. In veterinary settings, patient cameras are used for two major purposes: to enable veterinarians to monitor hospitalized animals remotely, e.g. during the night, or to offer video visits to the hospitalized animal's owner. In the latter case, the footage is posted live on a website or shared with the owner by using a confidential weblink. To date there is no literature available on the experiences of pet owners or veterinarians with these camera systems. However, from researching the use of video observation in related contexts, e.g. in animal behaviour science, we know that video as a tool can provide scope for conflict (Giersberg and Meijboom, 2022). Recordings often present unanticipated information about the animals or the people caring for them. Is it clear for how long a veterinarian is expected to monitor an animal remotely and at which indications they should return to the practice and take action? What about an owner viewing their animal in distress but no one to intervene?

Our ultimate aim is to propose a framework for ethical reflection and responsible use of patient cameras in veterinary settings. A first step towards this objective is to investigate veterinarians' experiences with and their motivation behind using patient cameras. As our desk research yielded hardly any information on this topic, we conducted an exploratory survey among veterinary professionals in the Netherlands.

Methods
An online survey with 19 questions of different types (mainly single-choice and free-form questions) was created in Dutch using Qualtrics XM (Seattle, USA). The survey covered questions on age category, occupation and animals worked with, and on use of and experience with patient cameras. Although we are mainly interested in cameras to monitor hospitalized animals or to provide video visits, we explicitly asked about the use of security cameras to avoid confusion. Participants who indicated to use cameras could answer the full survey. Participants who indicated to have used cameras in the past or intended to use them in the future were directed to more general questions on advantages and disadvantages of these systems. Participants who indicated to not use cameras were directed to the end of the survey.

The link to the survey was disseminated through the Dutch professional association of veterinarians, personal networks and the authors' social media accounts (LinkedIn, Twitter). Respondents could fill in the survey from April 3 to 18, 2023.

In line with our aim to provide a first overview of the topic, quantitative data were analysed descriptively using SPSS (v.28, IBM, Armonk, NY). Free-form text responses were summarized and in some cases presented as direct quotes. Responses indicating no other occupation than veterinarian, veterinary nurse or veterinary student and surveys completed at least up to the question on camera use were included in the analysis.

Results and discussion

In total, 41 valid responses were recorded. When interpreting the results, the small sample size needs to be considered. As the survey was disseminated through social media, it is possible that people not belonging to the target group answered it. We limited this risk by providing the questionnaire in Dutch and adding a free-from option to the question on occupation. The largest proportion of participants works in practices or clinics for small animals (85%), followed by horses (10%) and mixed practices (5%). Of these practices, 44% use camera systems, 14% have used them in the past or are considering to use them in the future, and 42% are not using any cameras. Several participants (n=18) specified the use of the cameras: 61% use them for remote patient monitoring by veterinarians, 28% for security reasons, and 11% for video visits by animal owners.

In line with the literature on hospitalized infants (Weber *et al.*, 2021), participants using cameras for video visits agree that these systems improve the contact between the hospitalized animal and the owner. However, one veterinarian stated: *'By watching, some owners claim that the animal has been unattended for too long. But they don't see that people regularly peek inside.'* Here, the partiality of the recoded situation leads to misinterpretations by the owners (Giersberg and Meijboom, 2022).

The main advantage for participants who use cameras for patient monitoring is that they can check on the animal from remote locations such as their homes and during breaks or outside workhours. At the same time, this seems to be the largest pitfall: veterinarians experience the pressure to act on the information seen. One participant mentioned *'a feeling of guilt'* if they missed an incident on video. Unexpected or ambiguous situations on video in the context of live monitoring of hospitalized animals require a quick interpretation of what is seen, a direct weighing of various interests, and immediate action. This adds an additional dimension to the need for retrospect reflection on similar observations in research settings (Giersberg and Meijboom, 2022).

Considering these potential ambiguities and conflicts, it is remarkable that 59% of the respondents (n=17) do not have or are not aware of any guidelines on

camera use in their practice. Existing rules are limited to image access and signs indicating the presence of cameras.

Conclusion

Our exploratory survey among veterinary professionals indicates several areas of morally relevant conflict regarding the use of patient cameras. These include divergent owner expectations but also the pressure for the veterinarian to act on the additional information provided by the footage. The absence of clear guidelines in many practices underlines the need for a framework for ethical reflection and responsible use of cameras in veterinary practices. Future research should take into account additional veterinary contexts of using video as a tool, e.g. security (focus on crime prevention and detection) and telemedicine (focus on communication between veterinarian and animal owner).

References

Giersberg, M.F. and Meijboom, F.L.B. (2022). Caught on Camera: On the Need of Responsible Use of Video Observation for Animal Behavior and Welfare Research. Frontiers in Veterinary Science, 9: 864677, doi: 10.3389/fvets.2022.864677.

Reimer, A., Mause, L., Hoffmann, J., Mantell, P., Stümpel, j., Dresbach, T. and Scholten, N. (2021). Webcam use in German neonatological intensive care units: an interview study on parental expectations and experiences. BMC Health Service Research, 21: 970, doi: 10.1186/s12913-021-06901-7.

Weber, J.C., Sohn, K., Sauers-Ford, H.S., Hanhauser, A., Tancredi, D.J., Marcin, J.P. and Hoffman, K.R. (2021). Impact of a Parent Video Viewing Program in the Neonatal Intensive Care Unit. Telemedicine and e-Health, 679-685, doi: 10.1089/tmj.2020.0251.

16. To treat or not to treat - and for whose sake? Ethical considerations among veterinarians treating cats with diabetes mellitus

N. Rothlin-Zachrisson[1], B.S. Holst[1], M. Öhlund[2] and H. Röcklinsberg[3]*
[1]Department of Clinical Sciences, Swedish University of Agricultural Sciences, Uppsala, Sweden; [2]Swedish Medical Products Agency, Uppsala, Sweden; [3]Department of Animal Environment and Health, Swedish University of Agricultural Sciences, Uppsala, Sweden; ninni.rothlin.zachrisson@slu.se

Background
Within veterinary medicine, the veterinarian's ethical position might influence medical actions taken. Providing information and support for owners is an important part of daily veterinary work that facilitates both ethical and medical decision-making. Except legal responsibilities, veterinarians have moral obligations to work in the animal's best interest and to ensure good animal welfare. Views on what constitutes these concepts of interest and welfare can be diverse. In addition, the veterinarians' obligations include those towards owners. Today, most companion animals are regarded as family members and advanced veterinary medical intervention is often well accepted, if not expected, by many owners. Parallel to this, cost sensitivity, owner ability and divergent views on the role of animals in relation to humans correspond to opposing aspects of animal care taking. Owners cannot necessarily be expected to offer medical care for the animal, and euthanasia is the only practical option in spite of good medical prognosis. Compromising with ethical convictions is common (Morgan and McDonald, 2007), with moral stress being recognized as a significant problem within the veterinary profession (Moses *et al.*, 2018). Following the development of medical advances in veterinary medicine seen in the last decades, the implication of moral stress has evolved from mainly concerning euthanasia based on ethically questionable reasons ("convenience euthanasia") to include different aspects of disease management (Rollin, 2011). The spectrum of owner demands of extensive treatment despite poor prognosis and a most probable elongation of suffering on the one hand and owner unwillingness or inability to implement the treatment which gives the animal the best chances of a favorable disease outcome on the other inherits a diversity of potential ethical challenges.

Diabetes mellitus (DM) is a common endocrinopathy in cats, and as knowledge of the disease and treatment have evolved over the last two decades, DM in cats has a better prognosis than ever before. Diabetic remission, meaning that exogenous insulin is no longer needed to maintain normal blood glucose, is reported in a substantial proportion of diabetic cats. For other cats, treatment might be lifelong, but if adequate disease control can be achieved, the quality of life can be excellent despite DM. Medical treatment includes daily insulin injections alongside blood glucose monitoring, suitable diet and an active lifestyle. Although impact on cat and owner lifestyle can be extensive, owner commitment is crucial for successful disease outcome. Most reported issues among owners to diabetic cats affect the owner and are related to the

treatment regimen, like difficulties travelling or sustaining social life. Aspects related to the cat, like worrying over limitations in the cat´s life due to DM, are often not deemed as important. Many initial owner concerns seem to decrease significantly with time (Albuquerque *et al.*, 2019). Another treatment alternative is euthanasia of the cat, an irrevocable but sometimes inevitable option. One out of ten cats are euthanized upon diabetes diagnosis (Niessen *et al.*, 2017). Reasons for this include owner unwillingness to initiate treatment, insufficient support from veterinarians and poor prognosis. In many cats, treatment optimization is traded for owner convenience, leading to ethically stressful situations.

Aim

This study aims to qualitatively explore experiences and ethical considerations among veterinary clinicians treating cats with DM and to investigate the role of different ethical views in veterinary decision making.

Method

To do so, individual in-depth semi-structured interviews with Swedish veterinary clinicians treating cats with diabetes mellitus were performed. Participants were recruited through social media and by personal contacts. The number of interview subjects were set as to when saturation was achieved, and two test interviews were performed prior to recruitment of participants. The interviews of approximately 60 minutes each were performed during 2021 by video conference. The interviews were manually transcribed for later thematic analysis with a deductive approach for identification and coding of recurrent ideas (themes) within relevant topics (Braun and Clarke, 2006). Areas of discussion during interviews included different views upon DM diagnosis, choice of treatment regimen, quality of life of the cat, obligations towards cat and owner and euthanasia. All data analysis is/was performed by the research group. In total, 11 veterinary clinicians were interviewed. The participants all worked with small animal veterinary medicine in different sized clinics in both rural areas and towns and cities in Sweden. Work life experience varied between five and 30 years. Ten of 11 participants were female.

Results

Preliminary results showed that veterinary priority of obligations against cat and owner were demonstrated through different treatment strategies with main focus on either The cat, The owner or both Cat and owner. By either optimising a successful outcome for the diabetic cat, reducing the efforts demanded by the cat owner or looking to compromise as to see to the interests of both, we saw a diversity of ethical views related to treatment of DM in cats. However, compromising with one´s own ethical beliefs was common and connected with experiencing moral conflict and stress. Situations leading to moral conflict included disagreement upon euthanasia, cat negligence and owner unwillingness to initiate optimal treatment. To deal with moral stress, a process of ethical desensitisation was deemed necessary by several participants, either consciously implemented (“Sometimes you have to protect yourself”) or not (“Even if I disagree, I must respect the owner´s choice [of euthanasia], but I

try not to think about it as much"). All participants expressed a need of more time for ethical reflection in the work environment, both on individual and group discussion basis.

Conclusions

In conclusion, a variety of ethical values are inherent and challenged in veterinary medical management of cats with DM. Moral stress might evolve as these ethical convictions are conflicted, highlighting ethical desensitisation as a possible major management strategy, with impact on both veterinary and animal wellbeing.

The current project is ongoing and detailed results are to come.

References

Albuquerque, C.S., Bauman, B.L., Rzeznitzeck, J., Caney, S.M. and Gunn-Moore, D.A. (2019). Priorities on treatment and monitoring of diabetic cats from the owners' points of view. Journal of Feline Medicine and Surgery, 6: 506-513.

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology 3(2): 77-101.

Morgan, C.A. and McDonald, M. (2007). Ethical dilemmas in veterinary medicine. Veterinary Clinics of North America: Small Animal Practice 37: 165-179.

Moses L., Malowney, M.J. and Wesley Boyd, J. (2018). Ethical conflict and moral distress in veterinary practice: A survey of North American veterinarians. Journal of Veterinary Internal Medicine 32: 2115-2122.

Niessen, S.J.M., Hazuchova, K., Powney, S.L., Guitian, J., Niessen, A.P.M., Pion, P.D., Shaw, J.A. and Church, D.B. (2017). The Big Pet Diabetes Survey: Perceived Frequency and Triggers for Euthanasia. Veterinary Sciences 4: 27.

Rollin, B.E. (2011). Euthanasia, Moral Stress, and Chronic Illness in Veterinary Medicine. Veterinary Clinics of North America: Small Animal Practice 41: 651-659.

17. Emerging stronger from COVID: A thematic analysis of US veterinarians' perspectives on pandemic preparedness, animal welfare and ethics

R. Anthony
Department of Philosophy, University of Alaska Anchorage, Anchorage, USA; rxanthony@alaska.edu

Introduction
The public health disaster resulting from the new coronavirus (SARS-CoV-2/COVID-19) pandemic is revealing the close social, economic and political complexities and linkages between human and animal welfare (CDC, 2020). It has been a wake-up call to enhance public health preparedness and crisis standards of care to prevent and/or mitigate a future pandemic that could be worse and potentially more deadly. It also raises serious concerns about the security and resilience of our food systems, including fragile supply chains and has impacted not only the profitability and sustainability of US farms, but also the capacity of farmers to provide animal care (AVMA, 2020; Splitter, 2020). This presentation highlights some results from the WELLANIMAL Project (PROJ NO: ALKW-2020-07183 AGENCY: NIFA). The WELLANIMAL project seeks to improve the viability and sustainability of the US food system by providing ethical guidance on moral dilemmas during a pandemic and zoonoses. It will strengthen or supplement One Health strategies in alleviating conflicts during an emergency and propose ways of effectively communicating animal welfare issues during a pandemic or zoonoses with diverse publics.

Methodology
An 11-person panel of US-based veterinary experts representing public health, disease management, small animal practice, agricultural animal medicine, wildlife medicine and One Health were joined by experts from bioethics and science-citizen communication. The panel was subdivided into smaller discussion groups of 3-4 members each. These sub-group met separately for approximately 1.5 hours. In their sub-groups, panelists were required to respond to a series of questions regarding the SARS-CoV2 pandemic response. Four research question anchored this values-aware study. That is, "During a novel pandemic or zoonotic disease control:

1. What questions ought the public think about regarding the human-animal relationship and how should they balance the conflicts of duties between human and animal interests?
2. What are the topics that animal caregivers (e.g., of companion animals or pets) or caretakers (e.g., of research labs, farms, zoos) should understand in order to make optimal animal care decisions?
3. What are some potential communication barriers that may impede the implementation of good practices for crisis management (preparedness-mitigation-response-recover) decision-making?
4. What ought to be the role of science and ethics in debates on animal welfare and public health?"

The principal investigator served as moderator and panelists' responses were recorded and transcribed. A six-phase thematic analysis process consistent with Braun and Clarke (2019) was performed on the transcribed responses. This involved a number of rounds where the respondent/data-based meanings were open-coded and emphasized. The open-coding process contributed to themes that addressed the research questions.

Results

Four themes emerged, including: improved understanding about interspecies solidarity and care (*Theme 1*: Relationality and Interdependence); greater crisis management and care strategies that are trustworthy, inclusive and equitable (*Theme 2*: Integration); investment in holistic frameworks like One Health to overcome siloed thinking, recognizing that human health cannot be separated from animal and environmental health (Theme 3: Connectivity); and the need for new education and crisis planning/management tools, including table-top exercises that address problem description, multivariant thinking, values pluralism and downstream consequences (Theme 4: Engagement, Augmentation and Innovation). The four themes underscore the essentiality of ethical analysis to enable structured dialogue and deliver defensible solutions during a zoonosis/pandemic.

Properties for *Theme 1* include:

i. "This pandemic was a "wake up call" for better animal disaster management."
ii. "The singular focus by public health officials, politicians and an impressionable public on certain endpoints at the expense of other things resulting in negative impacts can result in poor crisis management and delay recovery."
iii. "The public should be invited to deal with the question whether the animals' sacrifice is worth it... the public should be aware of the costs/harms done in order to be protected from the disease spreading."

Properties for *Theme 2* include:

i. "We ought not to perceive of animals as mainly sources of health risks, and instead recognize that animal and human health as mutually dependent."
ii. "A holistic view shifts focus on the animal's overall biography and its well-being in-community, instead of just adopting a best interest principle, which tends to frame caring for animals as predominantly about increasing positive and limiting negative subjective experiences."
iii. "All decision-makers should be reflective about their tendencies towards motivated reasoning. Caretakers, given that they are serving to some extent as society's agents, should further ask "Who should have a voice in this decision?" and in particular, "Who has not yet been included in the conversation?"

Properties for *Theme 3* include:

i. Siloed thinking can frustrate crisis disease management and communication.
ii. Veterinary profession is at a crossroads – the pandemic underscored the strain facing the profession and burnout.

iii. During a pandemic or zoonosis, it is important to increase the visibility of veterinary services and to engage with media. Communication should go beyond health risks and also highlight the (potential) impact on the other dimensions of human life and how assessments/ trade-offs have been made.

Properties of *Theme 4* include:

i. We must learn from Covid-19 public health responses, with particular attention to planning and preparedness that involves multispecies and multivariant thinking.
ii. Experts in general (both scientists and ethicists) should be "on tap" but not "on top."
iii. “Ethics should not replace political decisions... Its role is to inform decision makers about implications or violations of values, norms or duties.”
iv. Building long terms relationships should be a part of understanding each other’s language and as a way to be sensitive to a fuller range of contexts when calculating the costs of competing interventions.

Conclusion

In sum, the panelists envision an agricultural system that brings human-centric interests into alignment with a better understanding of our shared vulnerability with animals and the environment. The panelists were in favour of advancing the welfare and health related interests of people-animals-the environment seen as a holistic unit (e.g., supportive of a One Health framework).

References

American Veterinary Medical Association (AVMA) (2020). Evaluating Emergency Euthanasia or Depopulation of Livestock and Poultry. Available at: https://www.avma.org/sites/default/files/2020-04/Humane-Endings-flowchart-2020.pdf. Accessed 29 April 29 2020.

Braun, V., Clarke, V., Hayfield, N. and Terry, G. (2019). Answers to frequently asked questions about thematic analysis. Available at: https://cdn.auckland.ac.nz/assets/psych/about/our-research/documents/Answers%20to%20frequently%20asked%20questions%20about%20thematic%20analysis%20April%202019.pdf. Accessed 5 February 2022.

Centers for Disease Control and Prevention (CDC) (2020). Coronavirus Disease 2019 (COVID-19). Available at: https://www.cdc.gov/coronavirus/2019-ncov/faq.html#COVID-19-and-Animals. Accessed 2 April 2020.

Splitter, J. (2020). Farmers Face Their Worst-Case Scenario: ‘Depopulating’ Chickens, Euthanizing Pigs and Dumping Milk. Forbes. Available at: https://www.forbes.com/sites/jennysplitter/2020/04/28/farmers-face-their-worst-case-scenarios-depopulating-chickens-euthanizing-pigs-and-dumping-milk/#571aee873003. Accessed 28 April 2020.

Section 7

Veterinary ethics in equine practice: Dealing with particularities in the professional care and management of horses

18. Conceptualising horse care: a study of owners' and their respective veterinarians' experiences of caring for an older horse

R. Smith[1], G. Pinchbeck[1], C. McGowan[1], J. Ireland[1] and E. Perkins[2]*
[1]Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Neston, UK; [2]Institute of Population Health, University of Liverpool, Liverpool, UK; rebecca.smith@liverpool.ac.uk

Background
The inherent reliance on humans to provide for a horse's needs means the human-horse relationship is key to determining how, and by which means, a horse's needs are met as they grow older. A veterinarian's involvement in a horse's care requires employment by the horse's owner, and research suggests that as a horse ages routine veterinary involvement reduces (Ireland *et al.*, 2011). Whilst differences between owner and veterinary reporting of health conditions has been identified (Ireland *et al.*, 2012; Malalana *et al.*, 2019), little is known about how these understandings are constructed, or how they are handled in the veterinary consultation. This study adopted a sociological approach to understand how horse owners and veterinarians make decisions regarding care of the older horse.

Methods
Data were collected and analysed using a constructivist grounded theory approach as described by Charmaz (2014). Multiple sources of qualitative data were analysed, including; open-access online discussion forum threads containing 326 comments, semi-structured interviews with 25 owners of older horses and nine of their respective veterinarians, and 13 sets of veterinary clinical records. Data relating to owners and veterinarians were analysed individually and relationally.

Results
Analysis identified the dynamically changing relationship between horse and owner that shaped owners' views on health and wellbeing. Owners' concerns and priorities for their horse were contextual, and rooted in their individual relationship. Perceptions of age-related change shaped how owners constructed and sought to manage issues as they arose. Whether problems in the horse constituted the need for veterinary advice was dependent upon past experiences with older horses, independent research and the veterinarian-owner relationship.

For veterinarians, the way in which owners sought veterinary advice, or presented their issue of concern, reflected the degree of motivation to care for the horse. Difficulties for veterinarians arose where owners did not engage in routine care provision, were perceived as unable to detect problems in their horse, or delayed seeking advice. Veterinarians had a medicalised view of the horse's health – this, as well as their interaction with the horse's owner, shaped the construction of 'appropriate' care and impacted on approaches to achieving owner adherence to advice. Veterinarians' perspectives on socially

acceptable care were shaped by their understanding of species-specific needs, and whether owners were providing appropriately for those needs. The success, or otherwise, of veterinarian-owner interactions influenced owners' uptake of veterinary advice and future advice-seeking behaviours.

Conclusions and implications for practice

Owners' reasons for involving the veterinarian were individualised and temporally-contingent due to the dynamically changing nature of nurturing the older horse. While veterinarians' perceptions of 'good' care were changeable, they pivoted around biomedically informed constructs of health and welfare. The divergent experiential contexts through which owners' and veterinarians' expertise evolved were however, not simply additive; they represented radically 'other' ways of understanding the world (Jasanoff, 2003).

Findings prompt the need to consider that veterinarians' professional responsibilities depend upon, and should extend to, their understanding of owners' dynamic management of the older horse. Ethical approaches which acknowledge, rather than seek to reduce, understanding of the contextual nature of veterinarians' decision-making, and the networks of relationships in which care is embedded, may better support veterinarians in practice.

References

Charmaz, K. (2014). Constructing Grounded Theory. 2nd edn. SAGE, London.

Ireland, J.L., Clegg, P.D., McGowan, C.M., McKane, S.A. and Pinchbeck, G.L. (2011). A cross-sectional study of geriatric horses in the United Kingdom. Part 2: Health care and disease. Equine Veterinary Journal, 43: 37-44.

Ireland, J.L., Clegg, P.D., McGowan, C.M., McKane, S.A., Chandler, K.J. and Pinchbeck, G.L. (2012). Comparison of owner-reported health problems with veterinary assessment of geriatric horses in the United Kingdom. Equine Veterinary Journal 44: 94-100.

Jasanoff, S. (2003). Breaking the Waves in Science Studies: Comment on H.M. Collins and Robert Evans, "The Third Wave of Science Studies". Social Studies of Science 33: 389-400.

Malalana, F., McGowan, T.W., Ireland, J.L., Pinchbeck, G.L. and McGowan, C.M. (2019). Prevalence of owner-reported ocular problems and veterinary ocular findings in a population of horses aged ≥15 years. Equine Veterinary Journal 51: 212-217.

19. Exploring factors that influence employee engagement and work satisfaction among equine veterinary professionals

Y. Elte[1], K. Acton[2], J. Martin[3], M. Nielen[4], P.R. van Weeren[1] and I.A. Wolframm[5]*
[1]Department of Clinical Sciences, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands; [2]School of Veterinary Medicine, University College Dublin, Dublin, Ireland; [3]School of Natural and Environmental Sciences, Newcastle University, Newcastle upon Tyne, United Kingdom; [4]Department of Population Health Sciences, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands; [5]Van Hall Larenstein, University of Applied Sciences, Velp, Netherlands; y.elte@uu.nl

Background and aim
Professionals working in the equine veterinary field face significant challenges (Elte *et al.*, 2021). They are tasked with providing often life-saving care to their patients, while managing the expectations of horse owners as well as working irregular hours on a regular basis. Despite considerable anecdotal evidence of intrinsic motivation and commitment to what is often considered a vocation rather than a job, working in equine veterinary practice can be a source of considerable work-related stress (Hatch *et al.*, 2011). However, relatively few studies investigating work satisfaction and engagement specifically among those working in equine veterinary practice. Our study aimed to identify predictors of employee engagement and work satisfaction among professionals in the equine veterinary sector, with a focus on demographic and work environment-related factors.

Method
The study employed a cross-sectional design, using an online survey to investigate work satisfaction and employee engagement among equine veterinary professionals from the UK, US, and the Netherlands. Professionals in authors' home countries (The Netherlands and the United Kingdom) were targeted, as was the country with the largest equine veterinary organization in the world (United States). Due to EU privacy regulations the survey was distributed via social media and veterinary organizations in the afore mentioned countries.

Results
A total of 518 complete responses to the survey were collected from participants who provided informed consent and primarily worked with equines. he majority of responses came from the targeted countries, namely the United Kingdom (37%, n=189), the Netherlands (11%, n=58), and the United States (35%, n=183). Additionally, there were 88 responses (17%) from 29 non-target countries. Most of the respondents were female (84%, n=437), with slight variations among the three target countries (UK 85%, NL 74%, US 90%).

The results of the study suggest that work engagement and satisfaction in the veterinary profession can be assessed using four factors. These factors include the alignment of personal core values with the mission of the veterinary practice (referred to as "pride and purpose" for brevity), the interactions

between staff members and management (company culture and relationship with management), formal employment conditions in terms of responsibilities and rewards (working conditions and compensation), and the level of collegiality and support for personal and professional growth (team culture and learning opportunities). These factors, along with significant interactions with relevant personal and professional demographics, provide valuable insights into the dynamics of equine veterinary professionals.

Employment status was found to be a significant predictor of overall work satisfaction in all four factors, with employers demonstrating higher levels of satisfaction compared to employees ($p<0.0001$ for factors “pride and purpose”, “company culture and relationship with management” and working conditions and compensation””, and $p<0.01$) for factor “team culture and learning possibilities”). This suggests that the ability to influence and control work-related matters is highly important to equine veterinary professionals. Autonomy, or the ability to control one's own actions and behaviors, is considered a crucial psychological need for effective functioning and well-being according to Self Determination Theory (Deci and Ryan, 2015). Our study also highlighted the importance of leadership styles in influencing employee engagement. Additional research is required to determine which styles have the most positive effects in equine veterinary practice.

Participants from the United Kingdom (UK) showed higher work satisfaction in terms of team culture and learning possibilities compared to other countries. This could be attributed to the active promotion of professional development opportunities and a supportive atmosphere in UK veterinary practices (Cake *et al.*, 2019). Professional roles were found to impact work satisfaction, with veterinarians experiencing lower satisfaction than non-veterinarians. Long working hours and low income may be contributing factors to veterinarians' dissatisfaction.

Individuals without a partner or dependents reported higher work satisfaction in terms of pride and purpose ($p<0.05$). This could be due to the absence of conflicting responsibilities related to family and housework, the stress of which might negatively impact work satisfaction. To these individuals, interpersonal relationships in the workplace become increasingly important as they fulfill the need for relatedness and contribute to overall well-being.

Work experience was also found to influence work satisfaction, with participants with less than five years of experience reporting higher satisfaction in terms of team culture and learning possibilities ($p<0.05$). Collegiate support from colleagues played a significant role in enhancing work satisfaction for less experienced professionals. Older colleagues, on the other hand, scored higher in terms of working conditions and compensation, potentially due to better coping strategies and generational differences in work attitudes.

The type of horse treated was identified as another factor affecting work satisfaction, with veterinarians working with sport horses experiencing higher

satisfaction compared to those focusing on racehorses ($p<0.05$ for factor "pride and purpose" and "company culture and relationship with management", $p<0.01$ borderline/ non-significant for factor "team culture and learning possibilities). The intrinsic motivation associated with providing care for sport and leisure horses, given the type of attachment owners have to these horses, may contribute to this difference (Zilcha-Mano *et al.*, 2011). Further research is needed to explore this concept and understand the perspectives of racehorse owners in relation to veterinary care.

Conclusion

In summary, this study sheds light on the predictors of employee engagement and work satisfaction in the equine veterinary profession. Factors such as employment status, leadership styles, workplace culture, personal demographics, and the type of horse treated all play significant roles in shaping the experiences of equine veterinary professionals. Understanding these dynamics can help optimize job satisfaction and improve the overall well-being of individuals in the profession.

Our findings suggest that work engagement and satisfaction in equine veterinary practice can be assessed using four key factors: Pride and purpose, Company culture and relationship with management, Working conditions and compensation, and Team culture and learning opportunities. Results highlight the importance of considering the needs of inexperienced colleagues and those with demanding family commitments, as well as providing employees with a degree of autonomy in order to maintain a satisfied workforce in the equine veterinary profession.

References

Cake, M. *et al.* (2019). VetSet2Go: a collaborative outcomes and assessment framework building employability, resilience and veterinary graduate success. Available at: https://ltr.edu.au/resources/ID15-4930_Cake_FinalReport_2019.pdf. Accessed 20 July 2023.

Deci, E.L. and Ryan, R.M. (2015). Self-Determination Theory. International Encyclopedia of the Social & Behavioral Sciences: Second Edition, pp. 486-491.

Elte, Y., Wolframm, I., Nielen, M. and van Weeren, P.R. (2021). Client satisfaction in equine veterinary practice: A structured review and qualitative synthesis. Veterinary Record, 189(10).

Hatch, P.H., Winefield, H.R., Christie, B.A. and Lievaart, J.J. (2011). Workplace stress, mental health, and burnout of veterinarians in Australia. Australian Veterinary Journal, 89: 460–468.

Zilcha-Mano, S., Mikulincer, M. and Shaver, P.R. (2011). An attachment perspective on human-pet relationships: Conceptualization and assessment of pet attachment orientations. Journal of Research in Personality, 45: 345–357.

20. Social proximity in horses

L. Torres Borda[1], J. Lumetzberger[2], P. Roth[2], U. Auer [3†] and F. Jenner [1†]*
[1]Department of Companion Animals and Horses, University of Veterinary Medicine Vienna, Equine Surgery Unit, University Equine Hospital, Vienna, Austria; [2]Institute of Computational Medicine, University of Veterinary Medicine Vienna, Austria; [3]Anaesthesiology and Perioperative Intensive Care Medicine Unit, Department of Companion Animals and Horses, University of Veterinary Medicine Vienna, Austria
[†]shared last authorship; Florien.Jenner@vetmeduni.ac.at

Background
Animal welfare and quality of life (QoL) are continuously evolving concepts and subject to ongoing discussions and changes as societal, ethical, economic, cultural, and political factors continue to shape our understanding and treatment of animals (Arndt *et al.*, 2022). Animal welfare primarily focuses on meeting the needs and promoting the well-being of animals as a collective group or a particular species by providing conditions that support good physical health, allow the expression of natural behaviours, and enable animals to lead a reasonably good life within the context of their species' requirements. QoL goes beyond meeting species-specific welfare standards and emphasizes the subjective experience of individual animals (Long *et al.*, 2022). It recognizes that animals within a species or group may have unique preferences, personalities, and emotional states and aims to assess and optimize the well-being of each animal on an individual basis. The dimensions of animal QoL, based on the human concept, encompass physical health, environmental conditions and social interactions as key domains.

Horses are highly social equids that, under naturalistic conditions, live in stable social groups, develop enduring affiliative relationships and spend most of their time in close contact with specific preferred partners. Sociality is an ethological need for horses that remains unaltered by domestication (Torres Borda *et al.*, 2023). However, domestic horses are commonly housed in individual stables with limited social contact or in-group settings that undergo frequent changes in-group composition. These conditions restrict opportunities for the formation of stable social bonds, thereby giving rise to welfare, QoL and corresponding ethical concerns. Traditionally animal welfare science and equine ethologists have primarily focused on agonistic interactions, despite the rare occurrence of such behaviors in stable horse groups living under species-appropriate housing and welfare conditions (Torres Borda *et al.*, 2023). This discrepancy contrasts with the well-established importance of affiliative interactions for equine welfare. Therefore, this study aims to establish objective and quantitative measures of social interactions and herd dynamics to facilitate research into ethological and veterinary concerns, such as investigating the effects of disease and pain on equine social behavior. Moreover, these social proximity measurements will serve as a valuable tool for assessing and optimizing equine husbandry and may help inform ethical decisions regarding animal welfare and QoL. We hypothesize that measuring accurately spatial proximity between individuals forming groups and the duration of social

interactions can serve as crucial indicators of equine intra-specific behaviour and may inform us as a social component of QoL in horses.

Methods
A stable (> two months) group of eight horses, four geldings and four mares (age: 12–31 mean: 25), which were housed in individual stables with daily (four to six hours per day) paddock (450m2, 30m x 15m) turn-out, were included in this study. The interindividual distance and distance to the hay-feeder was continuously (one measurement per second) measured for ten days during paddock turn-out using ultra-wide bandwidth sensors placed on the horses' halters and on the hay-feeder. Only measurements up to 50m distance between a sensor dyad were included, as measurements further apart than 50m (1.048% of the measurements) were considered irrelevant for direct social interaction and subject to potential measurement errors, which may be caused by the presence of other horses/objects between sensor dyads. The distance measurements were validated by correlation of the measurements between dyadic sensor pairs and comparison between the sensor data of each dyad and video-based distance measurements. To map the measured pixel-distances between the sensors in the images to real-world distances, the homography was estimated. Six sequences were selected where the horses were visible, localised and identified robustly. Measurements were taken every 10th frame, thus, 221 frames were annotated and used for validation.

Results
The high dyadic inter-sensor correlation (Spearman r =0.98, 95% CI: 0.9773-0.9774, p <0.0001, mean difference 15.57cm +/-97.3 s.d., median: 1, IQR: 2) confirmed good technical reproducibility and accuracy. Sensor validation using video analyses on a representative subset yielded a correlation of 0.83, p <0.0001.

On average, the horses remained 6.98 (+/- 5.0 s.d., median: 5.89m, 25%-75% Quartile: 3.25-9.68m) meters apart from each other and 5.78 (+/- 4.55 s.d., median: 4.46m, 25%-75% Quartile: 3.01-7.24m) from the hay (table 1). The nearest neighbour was at a distance <3 m for 21.59% to 60.11% of the time (table 2). The group of 8 horses was divided into one triad (horses 1,3 and 8) and dyad (horses 6 and7) of close associates (spending >46.65% of their time in <3 m distance) and three horses with no clear affiliative partner (horses 2, 4 and 5, max % time spent in <3m to another horse: 29.46%).

The association threshold for horses reported in the literature ranges from one to two body lengths or 1.5 to 3 m, with one study reporting that horses spend 60% of their time in 2m distance to their nearest neighbour (Bartlett *et al.*, 2022; Hildebrandt *et al.*, 2021; Jørgensen *et al.*, 2009). In the current study, the nearest neighbour threshold was 3m and only one pair was found to spend more than 60% of their time together (Table 2).

Table 1. Time spent in distance to the hay feeder or another horse (in % and standard deviation) depending on various ranges (in meters)

Range (in m)	Time spent in distance to the hay feeder (in %)	Std. Deviation	Time spent in distance to another horse (in %)	Std. Deviation
Less than 1	0.76	0.29	5.29	4.54
Between 1 and 2	3.15	2.48	8.94	5.48
Between 2 and 3	20.88	6.03	8.70	4.86
Between 3 and 5	31.02	6.37	19.02	3.85
Between 5 and 10	29.59	9.34	34.6	8.09
More than 10	14.60	4.05	23.45	8.31

Table 2. Nearest neighbour pairs

Horse	Horse 1	Horse 2	Horse 3	Horse 4	Horse 5	Horse 6	Horse 7	Horse 8
Nearest neighbour	Horse 8	Horse 8	Horse 1	Horse 2	Horse 1	Horse 7	Horse 6	Horse 1
% time spent in <3m	57.36	27.56	46.65	21.59	29.48	60.11	60.11	57.36

Conclusion

The continuous interindividual distance measurements obtained in this study with wearable ultrawide-bandwidth sensor technology could identify the spatiotemporal distribution of a group of horses during shared paddock turn-out and recognise affiliative partners by their proximity and the time spent in < 3m distance. The large interindividual distance relative to the enclosure size and the lack of a close affiliative partner of some horses observed in this study may indicate a suboptimal herd composition and the need for management interventions to facilitate sociality. The objective, quantifiable assessment of social interactions we established in this study can thus serve as a tool to monitor the social component of quality of life. By facilitating more standardized approaches to research the effect of husbandry and management conditions on equine social behaviour and the implementation of individualized strategies to optimize herd composition, the tool may contribute to evidence-based discussions regarding the ethical responsibilities of animal husbandry.

References

Arndt, S.S., Goerlich, V.C. and Van Der Staay, F.J. (2022). A dynamic concept of animal welfare: The role of appetitive and adverse internal and external factors and the animal's ability to adapt to them. Frontiers in Animal Science, 3, https://doi.org/10.3389/fanim.2022.908513.

Bartlett, E., Cameron, L.J., and Freeman, M. (2022). A preliminary comparison between proximity and interaction-based methods to construct equine (Equus caballus) social networks. Journal of Veterinary Behavior, 50: 36-45, https://doi.org/10.1016/j.jveb.2022.01.005.

Hildebrandt, F., Büttner, K., Salau, J., Krieter, J. and Kemper, N. (2021). Proximity between horses in large groups in an open stable system – Analysis of spatial and temporal proximity definitions. Applied Animal Behaviour Science, 242: 105418, https://doi.org/10.1016/j.applanim.2021.105418.

Jørgensen, G.H.M., Borsheim, L., Mejdell, C.M., Søndergaard, E. and Bøe, K.E. (2009). Grouping horses according to gender—Effects on aggression, spacing and injuries. *Applied* Animal Behaviour Science, 120(1–2): 94–99, https://doi.org/10.1016/j.applanim.2009.05.005.

Long, M., Dürnberger, C., Jenner, F., Kelemen, Z., Auer, U. and Grimm, H. (2022). Quality of Life within Horse Welfare Assessment Tools: Informing Decisions for Chronically Ill and Geriatric Horses. Animals, 12(14): 1822, https://doi.org/10.3390/ani12141822.

Torres Borda, L., Auer, U. and Jenner, F. (2023). Equine Social Behaviour: Love, War and Tolerance. Animals, 13(9): 1473, https://doi.org/10.3390/ani13091473.

Section 8

End-of-life care and decision-making companion animal practice

21. An Empirical Study on Euthanasia Decision-making: Pet Owner's View

*S. Joo and M.S. Chun**
Center for Animal Welfare Research, Research Institute for Veterinary Science, College of Veterinary Medicine, Seoul National University, Seoul, Republic of Korea; jdchun@snu.ac.kr

Introduction

Dogs and cats have shorter life spans than humans, so keeping pets means taking care of old and dying animals. Owners try to maintain the quality of life of their pets and ensure a good death at the end of their lives. Euthanasia may be a medical intervention in the best interests of animals, but it may be the most difficult decision at this stage (Yeates, 2010). Like many countries, pet euthanasia is legally allowed in Korea based on the Animal Protection Act and the Veterinarian Act and is enforced in veterinary settings. Veterinarians perform euthanasia at the will of pet owners, unless it violates laws and animal welfare regulations. But owners' autonomy in decision-making can be challenged because they have limited medical knowledge and are influenced by veterinarians' authorities. Moreover, they are frustrated by the worries, doubts, and grief they face at their animals' dying (Christiansen *et al.*, 2015). This qualitative study explored the experiences of decision-making processes surrounding end-of-life care and dying of pets from the perspective of Korean pet owners. In doing so, we aimed to identify the meaning of euthanasia for pet owners and the factors influencing their decision of euthanasia.

Methods

We collected narrative data from in-depth interviews with 30 pet owners who had lived with dogs or cats for over 10 years and experienced their pet's aging, illness, or death. Participants in this study ranged from 28 to 62 years old, with 28 women and 2 men. 17 participants were dog owners, 8 were cat owners, and 5 had both species. At the time of the interview, 26 participants had experienced the death of their pet. To deeply understand the participants' experiences, we conducted a thematic analysis (Braun and Clarke, 2006) of the documented narrative data using the MAXQDA.

Results

Participants explained guilt and helplessness when making euthanasia decisions for their pets. Most of the participants felt hesitant and uncertain about the euthanasia of their pets. Emerged thematic codes were: 1) the weight of the decision; 2) attitude toward euthanasia; and 3) veterinarians' role in euthanasia decision.

The Weight of the Decision

The first code, 'the weight of the decision,' was about how participants recognize this unavoidable situation. They experienced emotional, financial, and psychological difficulties while deciding on their pets' euthanasia. They were concerned about the proper role of a responsible owner.

At the end of the day (of the animal's death), I didn't want to keep him alive because there's no way of getting him recovered, and he's in extreme pain, so he couldn't sleep or even breathe. Later on, I turned off the oxygen device, … I was like, 'I want you to leave by yourself. I want you to die today.' … I thought I had to choose because I'm his 'mother.' (participant 11)

Attitude toward Euthanasia

The next code, 'attitude toward euthanasia,' showed a spectrum of perspectives on euthanasia from 'ultimate responsibility' to 'abandonment.' Some allowed euthanasia because it was 'the only way' to end their pet's suffering. Meanwhile, others refused it because euthanasia was "killing with my own hands" or 'giving up life.' Owners' attitudes toward euthanasia depended on their human-animal relationship, the pet's health status and quality of life, the perceived burden of caring, support from others, personal belief in 'good death,' and veterinarian-client-patient relationships.

Euthanasia would make me feel like 'I kill her with my own hands,' so I told the vet I couldn't do that. … Euthanasia sounds like just 'giving her up,' which may be my self-centered thought because it could be the right thing to do to get her out of pain quickly, but still, I don't know. (participant 27)

Veterinarians' Role in Euthanasia Decision

The final code, 'veterinarians' role in euthanasia decision' revealed how veterinarians played their role in this process. If participants had reliable communication with their veterinarians, they perceived euthanasia as 'partaking responsibility.' Meanwhile, because of some veterinarians' unethical and indifferent attitudes without empathy, participants were upset and lost trust in veterinarians.

So far, I've not really resisted deciding on euthanasia. Rather, it's a way of sharing 'the pain' with the vet, which I don't have to take 'full responsibility' for. (participant 25)

Discussion

Veterinary euthanasia is carried out without the consent of the animal patient or direct knowledge of the patient's interests (Quain, 2021). Because different stakeholders may have different views about an animal's quality of life and interests, they have different purposes for end-of-life care. Euthanasia decision-making is not just a medical issue; it is made within a system of legal and social rules that go beyond professional ethics. Especially the perception of "natural death" and "artificial death" in the context of medical decision-making cannot be decoupled from Korean thought and culture with its deep roots in Confucianism (Lee, 2010). Owners can undergo a "caring-killing paradox" due to their intimacy with their pets. As proved in a previous study (Shanan, 2011), how veterinarians provide care for a pet and their owner whose pet has died has the potential to alleviate or aggravate grief and build or destroy long-lasting relationships with the clients. We found that early sharing-decision making is desirable to reduce owners' frustration and ensure the best decision for animals.

In addition, discussions about the animal's meaningful and respectful life and death beforehand the end-of-life stage can help owners make a better decision.

Conclusion

Our findings showed how complex and challenging the participants' decision-making in their pets' euthanasia was. Owners' beliefs about a 'good death,' attitudes toward killing, and emotional intimacy often made euthanasia unacceptable. It was confirmed that veterinarians as supporters and advisers play a critical role and with compassionate communication can help clients who are frustrated and desperate in the critical moment for their pets at the end-of-life stage. Further quantitative research is needed to investigate Korean owners' perceptions of end-of-life care, 'good death,' and euthanasia. It will support empathy-based communication between veterinarians and owners.

References

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3: 77-101.

Christiansen, S.B., Kristensen, A.T., Lassen, J. and Sandøe, P. (2015). Veterinarians' Role in Clients' Decision-Making Regarding Seriously Ill Companion Animal Patients. Acta Veterinaria Scandinavica, 58: 1-14.

Shanan, A. (2011). A veterinarian's role in helping pet owners with decision making. Veterinary Clinics: Small Animal Practice, 41: 635-646.

Quain, A. (2021). The Gift: Ethically Indicated Euthanasia in Companion Animal Practice. Veterinary Sciences 8: 141.

Yeates, J. (2010). Ethical aspects of euthanasia of owned animals. In Practice 32: 70-73.

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22. Leaving Life. Preliminary empirical insights into hospice and palliative care in small animal practice

S. Springer[1], S. Axiak Flammer[2] and C. Dürnberger[1]*
[1]Unit of Ethics and Human-Animal Studies, Messerli Research Institute, University of Veterinary Medicine, Vienna, Austria; [2]Department of Clinical Veterinary Medicine, Vetsuisse Faculty, University of Bern, Switzerland; svenja.springer@vetmeduni.ac.at

Background and aim of the interview study
In recent years, there has been a growing demand for hospice and palliative care for chronically ill animals such as dogs and cats. The specific goals of hospice and palliative care lie in the management of pain and clinical symptoms to achieve the best possible quality of life regardless of disease progression, to care for the animal nearing death, and to provide guidance for their caregivers (Shearer, 2019; Shanan and Shearer, 2017).

With regard to the specific aims of hospice and palliative care, four aspects in particular have been hypothesized to be important and to underlie differences compared to 'general' veterinary practice (Springer and Flammer, 2021). First, the consideration of relationships is an important requirement. End-of-life care is not only shaped by emotional relationships between the animal and caregiver, but these relationships are terminated when the animal dies. Second, the consultation time can vastly increase since the medical care combined with support for the caregivers are time-consuming and less plannable than in general veterinary practice. Third, communication may change as the topics often discussed during consultation require the veterinarian to show clear and compassionate communication strategies. Based on the preceding aspects, it becomes apparent that additional infrastructural aspects must be considered to successfully implement hospice and palliative care including e.g., home visits.

Currently, the four addressed aspects mainly rely on theoretical assumptions and practical experience only and are not informed by systematically conducted studies. In this talk, we aim to provide empirical insights into veterinarians' perceptions of the changes, significance, and emerging challenges of the addressed aspects in the field of hospice and palliative care.

Material and methods
In total, 20 semi-structured interviews (INT) were conducted (data collection: Jan – April 2023) that included small animal veterinarians from Austria (n=5), Germany (n=8) and Switzerland (n=7). Study participants were either certified in the field of animal hospice and palliative care (n=3) or explicitly provided this service on their website (n=17). All interviews were conducted in German and followed a semi-structured interview guide consisting of six themes that included characterization of relationships, communication, time, and infrastructural requirements including home visits. Recordings were transcribed verbatim and transferred in the MAXQDA 2020 software program. Following the template organizing style (Crabtree *et al.*, 1999), categories and codes were formulated based on themes and key aspects of the interview guide and research questions. Using a deductive approach, the overall aim for the

presentation of preliminary results was to summarize segments of data and categorize similar data units (Miles *et al.*, 2014).

Preliminary Results

Relational aspects

All participants stated that they observed strong emotional bonds between the animal and the caregiver and that, in particular, trust between the veterinarian and the caregiver was important. Even though these two aspects were considered as essential requirements to successfully care for palliative patients, we identified differences with respect to the necessity of sympathy. One veterinarian stated: "Well, first and foremost, the chemistry has to be right. That's why I always say I'll go once beforehand and they have to get to know me, whether I suit them and the animal." (INT 12). On the contrary, one participant reported: “There doesn't have to be a lot of sympathy. I find very few people likeable." (INT 13). In addition, most veterinarians indicated that many relationships between the caregiver and them intensified. However, professional distance was also considered as important for the well-being of the veterinarian: “So I keep distance for my own well-being, as best I can. But I try not to be cold in any way, I just stay [...] correct.” (INT 1).

The aspect of communication

It also became apparent that communication with respect to the issues discussed underly changes in this working context. In addition to medical information, personal aspects of the caregivers come to the fore: "Of course, they also talk about [...] philosophical topics, spiritual topics, they reveal a lot about themselves to me. [...] Yes, it becomes very personal.” (INT 2). Further, many veterinarians indicated that channels of communication changed. On top of ‘normal consultation’ hours, veterinarians could be reached by phone, WhatsApp or e-mail. This was especially true during phases when a patient was expected to die soon. In this situation, some veterinarians emphasized that it was very natural to be available around the clock.

The aspect of time

Participants frequently mentioned that much more time was needed for their consultations of palliative patients when comparing with other patients: “It simply takes a lot of time. [...] I have to say, it is time-consuming [...]” (INT 6). In addition to the fact that successful palliative care needs a lot of time, it became apparent that having enough time is one of the most important aspects veterinarians can offer to both the patient and the caregiver. One veterinarian stated: “[...] I would simply wish to have even more time available, because that is the most important thing you can offer to people and their animals.” (INT 6).

Infrastructural aspect including home visits

When asked about the infrastructural aspects required for palliative care, it became apparent that the focus was not on economic aspects, but rather on organisational aspects including questions of efficient organisation of the daily work routine and the implementation of home visits. Even though most of the veterinarians offered home visits for palliative and hospice care, several challenges were identified in comparison to their work in general practice. These

included worse working conditions, more difficulty in handling the animal, not knowing what to expect in private households, and acquiring an insight into the caregivers' lives.

In the course of the presentation, we will not only present the identified changes, specific demands and challenges in terms of relationships, communication, time and infrastructure in this specific work context, but we will use our findings to show to what extent the professional self-image of the veterinarian changes from a "curing" to a "caring" one.

References

Crabtree, B.F. and Miller, W.L. (1999). Using codes and code manuals: A template organizing style of interpretation. In: Doing Qualitative Research, 2nd ed.; Crabtree, B.F. and Miller, W.L. (eds.), Sage Publications, Inc.: Thousand Oaks, CA, USA, 1999; pp. 163-178.

Miles, M., Huberman, A.M. and Saldaña, J. (2014). Fundamentals of Qualitative Data Analysis. In: Miles, M., Huberman, A.M. and Saldaña, J. (eds.): Qualitative Data Analysis: A Methods Sourcebook, 3rd ed., Sage Publications, Inc.: Thousand Oaks, CA, USA, pp. 69-93.

Shanan, A. and Shearer, T. (2017). Introduction. In: Shanan, A., Pierce, J. and Shearer, T. (eds.): Hospice and Palliative Care for Companion Animals: Principles and Practice. Wiley&Sons publishers, p. 6.
Shearer, T. (2019). Where Have We Been, Where We Going – Continuity from 2011. Veterinary Clinics of North America: Small Animal Practice, 49: 235-338.

Springer, S. and Flammer, S. (2021). Shifting from 'cure' to 'care' – theoretical considerations of small animal hospice and palliative care. In: Schübel, H. and Wallimann-Helmer, I. (eds.): Justice and food security in a changing climate, Wageningen Academic publisher, pp. 242-247.

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23. Dying like a Dog. A research project in its broader context

P. Kunzmann
Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour (ITTN), Working Group Applied Ethics in Veterinary Medicine, Veterinary University of Hanover, Germany; Peter.Kunzmann@tiho-hannover.de

Core question
"Why may I not die like my dog?" asked an old woman. Without medical equipment, when it is right time, painlessly? She saw “dying like a dog" as an ideal way of ending her own human life. Are the imaginaries, the perceptions und the concepts of “how to die” in fact converging between humans and animals - or do diverging ideas prevail and will continue to prevail in different settings?

The project
Our shared project at the Hanover Medical University (Dr. Gerald Neitzke) and the Hanover Veterinary University has investigated this question in detail. It was funded by DFG under the official title: “Dying like a dog: convergence and divergence of concepts in medical and veterinary discourse on end of life.”
To start with the divergences: In the case of animals, life shortening called “euthanasia” usually is permitted and even is accepted to avoid suffering; in human medicine, the preservation of life seems to be the upmost maxim. Sovereign decisions on the appropriate time for dying are common for animals; “quality of” life is the yardstick for such decisions. Therapy costs make sensible considerations. None of this is easily acceptable for dying humans.

At the same time, concepts seem to be converging and interfering in many ways. Ideas making their way from veterinary into human medicine: Shortening life as an avoidance of suffering, decision-making about the appropriate time of death and quality of life as the main concern. (More) liberal regulations for euthanasia for humans are propagated with reference to animals, or when quality of life becomes the central criterion: Quite I line with the title of his paper, “Even a Cow Would Be Killed”, Stafleu (Stafleu, 2016) disputes the constant hesitation to shorten human pain by euthanasia, as we would do in the case of suffering animals.

Starting from the human medicine perspective, the goal of "saving” lives and maximum therapy is the norm. Hospices e.g. were installed here to make the final phase of dying as comfortable as possible. The idea was taken over in veterinary medicine: With human owners being reluctant to have their animals “put down” too early, animal hospices are increasingly shaping final stages of animal patients.

Our project has redrawn the initially rough lines between animal and human medicine in a more subtle and differentiated way: By sharpening the most relevant terms (Selter *et al.*, 2022), but also by using empirical methods (Persson *et al.*, 2022) to find out more, e.g. about our guiding intuitions.

Even though the two disciplines and their practices seem to converge in many areas, a closer look reveals remarkable differences in detail. Some minor ones may concern the precise meaning of “palliative care” or the function of “hospices” in the respective contexts.

Two leading concepts

The question is to be asked: To which extent can the same terms be applied to the end-of-life decisions in humans and animals? Do we use the same set of categories in both fields, for example, when we speak of "autonomy"?

It should be taken into account that "autonomy" and "dignity" are key concepts in the discussion about human death. The relevance of autonomy for the question of a good death for humans is obvious; it shapes both social and political discourse and the relevant legal framework. "Dignity" is not quite so uncontroversial and universal, but even where the term is rejected as a “useless concept” (according to Ruth Macklin), the discourses cannot do without an examination of it. Both terms are associated with very different conceptual universes and traditions (Baranzke and Duttge, 2013:11). Accordingly, the relationship between the two is also highly controversial: While for a conservative interpretation the "gift" of human dignity sets limits to human access to life, for the liberal interpretation the core of human dignity is precisely the autonomous self-fulfilment of the human being. If necessary, also in the decision about one's own end. In "Autonomie und Würde" (“Autonomy and Dignity”) (Baranzke and Duttge, 2013), Baranzke and Duttge have documented the complicated relations between these two variables. As manifold as the interpretations are in the human sphere - they are fundamental for humans and cannot really be transferred to animals while keeping their core meanings. In Löwer's words: "Human dignity is resistant to consideration and intervention. It is a supreme value that does not allow any relativizing for heteronomous set purposes. Dignity is based on the autonomy to choose one's own life. It is obvious that all this could not be transferred to dignity of creatures" (cf. Kunzmann, 2013:532).

Impact of the project

None of this neutralises or relativizes the results of the project that has compared situations and decisions in which humans and animals are comparable at all: Humans, for example, who are not (or not any longer) accessible to verbal evaluation. However, these are "marginal cases" that do not show all of the freedom and responsibility that humans can perform. One result of the project is a stronger outline of these subtleties. Another one is the elaboration of "owner's and veterinarian's duties to meet the animal's (presumed) will in end-of-life decision-making" (Selter *et al.*, 2022). Even if the term "autonomy" cannot be borrowed directly from human medicine (Lehnus *et al.*, 2019) and can only be used in an analogous sense here: The comparison between human and animal end-of-life decisions highlights the many levels at which a fundamental approach can be explored. This approach can respect animals duly.

References

Baranzke, H. and Duttge, G. (2013). Autonomie und Würde: Leitprinzipien in Bioethik und Medizinrecht. Königshausen und Neumann, Würzburg.

Kunzmann, P. (2013). Die „Würde des Tieres"- Derivat der Menschenwürde oder eine Form der „Würde der Kreatur"? In: Baranzke, H. and Duttge, G. (eds.): Autonomie und Würde: Leitprinzipien in Bioethik und Medizinrecht. Königshausen und Neumann, Würzburg. pp. 529-549.

Lehnus, K., Fordyce. P.S. and McMillan, M.W. (2019). Ethical dilemmas in clinical practice: aperspective on the results of an electronic survey of veterinary anaesthetists. Veterinary Anaesthesia and Analgesia 46: 260-275.

Persson, K., Selter, F., Kunzmann, P. and Neitzke, G. (2022). Killing Kira, Letting Tom Go?—An Empirical Study on Intuitions Regarding End-of-Life Decisions in Companion Animals and Humans. Animals, 12: 2494.

Selter, F., Persson, K., Risse, J., Kunzmann, P. and Neitzke, G. (2022). Dying like a dog: the convergence of concepts of a good death in human and veterinary medicine. Medical Health Care and Philosophy 25: 73-86

Stafleu, F. R. (2016). Even a Cow Would Be Killed ...: About the Difference between Killing (Some) Animals and (Some) Humans. In: Meijboom, F. and Stassen, E.N. (eds.) The End of Animal Life: A Start for Ethical Debate, Wageningen: Wageningen Academic Publishers, pp. 103-114.

Section 9

Veterinarians' identity: normative demands and practical implications

24. Applying the normative imperative that vets ought to advocate for patient best interest

K. Hiestand
Royal Veterinary College, Hawkshead, London, UK; kahiestand@rvc.ac.uk

The autonomy principle in veterinary medicine

Previous work has argued that by following the human medical field in moving away from paternalism and adopting the primacy of autonomy, the veterinary profession has misinterpreted the autonomy principle (Hiestand, 2022). The privileges owners exercise over animal treatment decisions relate to their rights over property use, rather than application of self-rule over one's own person, as autonomy is described in bioethics literature (Beauchamp and Childress, 2013). Hiestand (2022) highlights that the veterinary practice paradigm makes use of proxy decision makers in the absence of patient autonomy and goes on to suggest that transference of autonomy to owners, as opposed to patients, represents not only a corruption of the principle, but may have negative consequences for animal patient welfare, integrity of the social contract and professional autonomy.

The status quo of owners and keepers acting at proxies reflects at its core, the property role of non-human animals. In the companion animal sphere, there is the additional role of personal relationship, and an expectation that owners are best placed to make treatment decisions accordingly. However, public awareness and knowledge regarding animals' needs may be lacking. Coupled with misunderstanding the umwelt of animals, uncritical anthropomorphism and a lack of skill in perceiving the sometimes-subtle behavioural signs that indicate animal mental states and welfare, it is possible that despite strong emotional bonds, those closest to animals may not be best placed to make decisions. Owners' autonomous decisions may thus cause harm to animals.

Veterinary patient best interests

If we transparently view veterinary treatment decisions as being made by proxy, then incumbent standards may be applied, such as the requirement that a decision is in an animal's best interest. Authors have drawn direct comparisons between companion animal healthcare, and the parent-child-paediatrician paradigm and have suggested the standard of best interest be incorporated in veterinary ethical frameworks (Gray and Fordyce, 2020; Hiestand, 2022). To do so places greater emphasis on animal patient welfare than client autonomy over their property, ensuring animal welfare is at the centre of treatment decisions. This can be considered a normative view as evidenced by professional guidance that entreats vets to "ABOVE ALL . . . ensure the health and welfare of animals committed to my care" (Royal College of Veterinary Surgeons, caps from original source). Furthermore, the view that vets ought to act as patient advocates is pervasive both within the profession and with the public. However, this professional duty to protect animal welfare is constrained by legal and regulatory frameworks that afford primacy to the

respect of owner autonomy. That many vets find it difficult to intervene on behalf of animal patients is borne out by the relative infrequency of occurrence and acceptability of negative welfare states, such as in cases of delayed euthanasia.

But what would happen if veterinarians were empowered to advocate on behalf of their patients' best interest, if client autonomy held less influence and animal welfare more? Via thought experiment and with reference to current literature, this paper examines the possible consequences of applying a best interest paradigm in companion animal veterinary practice, with specific consideration of specialist and referral settings which may carry unique ethical challenges.

Veterinarians as the proxy decision maker

Application of best interest raises the somewhat controversial view that veterinarians may at times, constitute a more appropriate proxy decision maker. However, are vet specialists any more accurate or skilled than owners in assessing what is best for an animal patient? Despite being highly trained in animal health care, vets are people too, hence vulnerable to biases and subjective assumption as all in the human condition. Veterinary training has been shown not to enhance ethical decision making (Batchelor and McKeegan, 2015), a possible explanation, that is worthy of further examination, is the generation of a misguided belief in veterinary objectiveness, expertise in animal welfare and consequent unnecessity of ethics due to 'knowing what is right'. Weich and Grimm (2018) outline the veterinary professions focus on health and disease held as a normative goal for vets. Animal health and welfare are often conflated, however knowledge and expertise in animal health does not necessarily translate to expertise in animal welfare. Furthermore, it has become more common for the veterinary profession to consider the human-animal bond within its sphere of concern, which while undeniably being important, can mean prioritisation of human perception of bond, and owner emotion being afforded significant weight against animal experience and suffering.

In addition, are there specific biases within the specialist veterinary sector that may impact their ability to assess a patient's best interests? There may be other normative values at play, such as a hierarchical construction of veterinary treatment options, a belief in a 'gold standard' and lionisation of absolute diagnosis that may serve to threaten patient welfare through overtreatment and futile procedures. Aspects of specialist care such as the need to enhance skills, attain of advanced qualifications, pioneer new procedures or treatments may compete with patients' best interest. The referral setting may also pose increased risks of contextual factors such as available resources (owner finance, equipment, skills, knowledge) more easily obfuscating a patient welfare focus. Furthermore, some may hold an underlying view that greater resource allocated to animal patient care equates to stronger human animal bonds, possibly affording owner emotion yet greater weight in treatment decisions.

Increasing dialogue which raises concerns of overtreatment in referral settings highlights both the need for animal patient advocates and the possible

limitations of vets in these settings applying the normative imperative that vets should take on this role (Grimm *et al.*, 2018). This paper will highlight possible mitigations such as the importance of training in both ethical reasoning and animal welfare which may serve to help vets maintain a patient focus. Furthermore, I propose and invite new areas for collaborative research such as investigation into ethical positioning and values of veterinarians, to understand if normative views on what a vet is, and particularly what a good vets is, are congruent across sectors (e.g. companion animal specialists and general practitioners), the relative weight of non-patient factors in treatment decision making, and willingness or reticence to intervene in owner autonomy in cases of patient welfare threat. Finally, while advocating for animal patient best interest is discussed as a normative value here, the role of vets in society remains in flux, particularly in light of companion animal healthcare advances, hence it seems timely for consideration of the social contract, what it is society want their vets to be, and whether the profession is upholding its side of the deal.

References

Batchelor, C.E.M., Creed, A. and McKeegan, D.E.F. (2015). A preliminary investigation into the moral reasoning abilities of UK veterinarians. Veterinary Record, 177(5): 124.

Beauchamp, T.L. and Childress, J.F. (2013). Principles of Biomedical Ethics. Oxford University Press (7th ed.).

Gray, C. and Fordyce, P. (2020). Legal and ethical aspects of 'best interests' decision-making for medical treatment of companion animals in the UK. Animals, 10(6): 1-13.

Grimm, H., Bergadano, A., Musk, G.C., Otto, K., Taylor, P.M., and Duncan, J.C. (2018). Drawing the line in clinical treatment of companion animals: Recommendations from an ethics working party. Veterinary Record, 182(23): 664.

Hiestand, K.M. (2022). The autonomy principle in companion veterinary medicine: A critique. Frontiers in Veterinary Science, 9.

Weich, K. and Grimm, H. (2018). Meeting the Patient's Interest in Veterinary Clinics. Ethical Dimensions of the 21st Century Animal Patient. Food Ethics, 1(3): 259-272.

25. Veterinary identity and moral residue: Could reclaiming compassion be a solace for an injured sense of self?

L. Moses
Center for Bioethics, Harvard Medical School, Harvard University, Boston, Massachusetts, USA; Yale Interdisciplinary Center for Bioethics, Yale University, New Haven, Connecticut, USA; Department of Bioethics, Case Western Reserve University School of Medicine, Cleveland, Ohio, USA; lisa_moses@hms.harvard.edu

Why is frequent ethical conflict so damaging to veterinarians?
We know that ethical dilemmas in veterinary medicine harm veterinarians. A system of overlapping, and frequently conflicting obligations is a root cause of many veterinary conflicts. But why, exactly, is this commonplace situation so destructive to veterinary professionals?
One possible answer is based in the veterinary identity. Many enter the profession because of compassion toward animal suffering. Veterinary students ascribe a primary duty to patients, even though the practical reality is quite different. Once in practice, veterinarians feel compelled to try and help both people and animals, despite the near impossibility of balancing those obligations. We end up acting in ways that don't feel like ethical, or emotional, resolution. Virtue ethics and relational ethical frameworks, among other moral theories, provide useful guidance as to why this scenario impacts veterinarians deeply but may not fully capture unique features in the profession.

Defining the impact of ethical conflict on veterinarians
The original concept of moral distress identified in nursing ethics has been applied and adapted to veterinary medicine (Moses *et al.*, 2018). And, like other professions, veterinary medicine is engaged in an important, profession-wide discussion about how to define the scope and meaning of moral stress, moral distress, and moral injury (for example, Arbe Montoya *et al.*, 2019). Epstein and Hamric, leading scholars on moral distress, have convincingly claimed that the most important distinction is between moral and psychological distress, as a blurring of these ideas misses the point "...that moral distress involves the result of a perceived violation of one's core values and duties, concurrent with a feeling of being constrained from taking ethically appropriate action." (Epstein and Hamric, 2009). Perhaps one reason why the concepts of moral distress adapted from nursing feel so familiar to veterinarians is that the tripartite system of veterinary obligations is closer to that of nurses than to physicians who have a clear primary duty to their patients.

Microethics and moral residue in veterinary practice
Regardless of how these concepts are delineated, the idea of *moral residue,* also defined in various ways, resonates with practicing veterinarians. This concept describes the lingering feelings remaining after facing ethical conflict and compromising moral values, regardless of whether the constraint on moral action was internal or external. This phenomenon has been described as "long-lasting and powerfully integrated into one's thoughts and views of the self." (Epstein and Delgado, 2010)

If veterinarians feel moral residue after acting in ways that contradict their own values, is damage to their self-identity involved in the process? Maybe the detrimental feelings of moral residue are caused by, or added to, when repeatedly acting in ways that feel bad, even when you know you did the best you could. And how much is a sense of agency limited when professionals act in morally conflicted ways?

Arguably, veterinary practice provides an abundance of daily, relational ethical conflict, usually called "microethics" or everyday ethics (see Truog *et al.*, 2015 for an explanation) besides the commonly described big ethical dilemmas. Specific to veterinary medicine is how rarely these ethical conflicts feel resolved to the professionals involved. The cumulative impact of ethical conflict, big and micro, might saddle veterinarians with a weight of moral residue that compromises a person's sense of being a "good" or virtuous person.

Compassion as a core feature of the veterinary personal and professional identity

For the many veterinarians who consider compassion towards animals central to their personal values, the practice can feel like a constant challenge to their conception of who they are. Physicians have the luxury of knowing that their primary duty is always to their patients, even when they cannot act on this duty. Veterinarians are denied this ethical clarity. Without a clear moral center to provide grounding, practitioners may feel like their values are being reshaped or pushed into a conflict between personal and professional identities (J. Pierce, personal communications).

When faced with regular conflicts between personal values and actions (or professional expectations), human psychology reacts to the aversive nature of cognitive dissonance in predictable ways. Cognitive consonance can be restored by changing your beliefs about yourself to match your actions, or by changing your actions to match your values. Living with long-standing identity conflict surely damages a healthy sense of self and self-esteem, perhaps even more so when resolution is achieved by compromising your values to match your actions.

Could reclaiming compassion help repair a damaged sense of self?

The intent of this presentation is to start a dialogue about compassion in the veterinary identity, how that goes awry in practice and whether recentering compassion as a value could help salvage a sense of agency in veterinary professionals. Other authors have proposed various deterrents and remedies for moral distress in healthcare. Multiple scholars call for the development of personal moral imagination, increased moral agency, and creation of a moral community (for example, Traudt *et al.*, 2016). Moving compassion back to the forefront as a primary motivator could be a way to solidify identity and help resolve identity conflicts, leading to greater moral agency. Intriguingly, incorporating compassion towards people (also) as a central value might provide another path forward to virtue for veterinarians.

The veterinary profession lacks broad investigation into the particular role that compassion as a value and virtue plays in veterinary identity. Several relevant bodies of work should be integrated into this discussion including the existing literature on empathy and compassion in veterinary students and practitioners, and E. Armitage-Chan's (Royal Veterinary College, University of London) work on the formation of a veterinary identity. There is also a need to explore the peculiarities of compassion in veterinary medicine from an empiric and normative perspective, as compassion appears to hold a special significance. The author would welcome discussions on the merits of this idea, counter arguments, and an informal exchange of anecdotes about the role of compassion in professional situations.

References

Arbe Montoya, A.I., Hazel, S., Matthew, S.M. and McArthur, M.L. (2019). Moral distress in veterinarians. Veterinary Record, 185(20): 631-631.

Carminati, L. and Héliot, Y. G. (2022). Between Multiple Identities and Values: Professionals' Identity Conflicts in Ethically Charged Situations. Frontiers in Psychology, 13: 813835.

Epstein, E. and Delgado, S. (2010). Understanding and Addressing Moral Distress. OJIN: The Online Journal of Issues in Nursing, 15(3). Available at https://doi.org/10.3912/OJIN.Vol15No03Man01. Accessed 16 May 2023.

Epstein, E.G. and Hamric, A.B. (2009). Moral Distress, Moral Residue, and the Crescendo Effect. The Journal of Clinical Ethics, 20(4): 330-342.

Moses, L., Malowney, M. J., & Wesley Boyd, J. (2018). Ethical conflict and moral distress in veterinary practice: A survey of North American veterinarians. Journal of Veterinary Internal Medicine, 32(6): 2115-2122.

Traudt, T., Liaschenko, J. and Peden-McAlpine, C. (2016). Moral Agency, Moral Imagination, and Moral Community: Antidotes to Moral Distress. The Journal of Clinical Ethics, 27(3): 201-213.

Section 10

Ethical reflections on the care of wild and zoo animals

26. A contemporary relationship and handling of wild animals from a biological and animal ethics perspective

T.G. Valencak[1,2] and R. Winkelmayer*
[1]College of Animal Science, Zhejiang University, Hangzhou, China; [2]Food Safety, Asutrain Agency for Health and Food Safety, Vienna, Austria; teresa.valencak@gmail.com

Increased abundance of wildlife in the cities

There is broad scientific consensus that mammals, birds, fishes and many invertebrates are fully susceptible to pain and capable of emotions. In addition, there is a new "capability approach" stressing animal skills (Nussbaum, 2023). Data from evolutionary biology and the cognitive and behavioral sciences confirm to what extent we previously had underestimated animal achievements or falsely categorized them (Huber, 2021). Our improved comprehension in the area of animal ethics and animal cognitive skills should accelerate the ongoing debate on how science (knowledge) and ethical treatment (moral) of animals could go hand in hand.

Although there is broad societal consensus that animal suffering has to be prevented, wild animals in our cultural landscape are insufficiently addressed. The traditional categorization of animals into useful or harmful ones has equally become obsolete in this context as the differentiation into livestock, animals in research, pets, wildlife or "other" animals.

For several reasons, including habitat loss, global climate change, and food availability along with „urban gardening" and „vertical farming" initiatives, previously declared "wild" animals like foxes, wild boar and roe deer nowadays commonly inhabit our cities and metropoles. People in or around the big cities encounter them in surrounding parks or green spaces and "compete" for space while they spread almost uncontrollably. Contemporary and fair handling of these animals have thus become very timely and has advanced to a whole of society endeavor. Our presentation will address practicable suggestions towards a better relationship with animals and better handling under consideration of modern scientific ethological data.

Re-thinking of wildlife management beyond hunting

Modern wildlife management is a complex control procedure requiring evidence based expert knowledge at all levels. Using evolutionary biological and ethical arguments, a better coexistence of humans and wildlife in harmony with climate protection measures and sustainable living criteria could be reached. More and more wildlife are populating urban areas, presumably due to identifying more attractive habitats than in the intensively cultivated landscape. Apart from a warmer climate during winter (2-4° higher than in the surrounding environments), urban areas are more attractive to wild animals due to a higher structural variety and even fewer persecution by predators (Reichholf, 2022).

There are some judicial differences between animal taxa according to their economic value for humans. Huntable wildlife versus not hunted species,

endemic species vs. neobiota and finally, different laws regulate species conservation, hunting, invasive species etc. From a contemporary ethical perspective, the legal differentiation is no longer timely since *all* animals deserve conservation and protection and the traditional simplified categorization of animals into harmful and useful ones has become obsolete.

Demand for improved attending to veterinary medical needs

Thus, the higher wildlife densities in urban areas together with a higher societal demand for animal welfare and care are creating a need for more intensive research in the veterinary field. We propose that veterinary scientists and veterinarians are preparing for an increased demand for clinical treatment of urban wildlife. Future initiatives should aim at improved subject specific trainings for practicing and prospective veterinary professionals. Through direct collaboration and round tables, students, professionals and scientists have to team up with ecologists and landscape architects and urban planners to develop future concepts for a peaceful coexistence between urban wildlife populations and humans.

Not only we foresee substantial research demand in the area of improved therapeutical approaches and preventive measures for different infectious diseases in wildlife species. Further, veterinary experts have to be involved in developing and testing innovative approaches to control population growth of some wildlife species without surgical means or without removing healthy individuals from the population. Next, urban citizens have to be trained better than ever before in how share their space with wildlife species and under when to take caution and how to adjust leisure time activities to breeding attempts among wildlife species.

Any improved management of wildlife involving ecologists, veterinarians and urban infrastructure specialists will not only serve the people, but will mainly benefit mammals and birds, insects and all other animals in and around big cities. While city suburbs are attractive to many people not least due to the proximity to nature and wildlife, veterinary professionals have a large responsibility in mediating between the interests of animals and humans to the extent that suffering and pain are to be excluded. To be implemented measures in this respect include a modern, science- based management reproduction plan, effective relocation projects and impactful and non-invasive (e.g. orally administered) vaccinations. These actions will require research and collaboration but will prevent tensions and conflicts in urban areas.

A good case study for an evidence based, collaborative biodiversity management comes from the City of Vienna, where rescue work and first aid for wildlife animals are professionally performed in all districts along with a “baby flap” for found and injured animals ensuring that citizens can engage in low-threshold animal protection, while at the same time ensuring that experts are involved and other stakeholders are not upset.

In conclusion, we are stating that any previously used categorization into wild-, domesticated, research or non-human animals is to be abolished and should not relate to the veterinary care that animals are receiving. Individual veterinary treatment should have priority over the protection of species so that every animal has to be treated in the best possible way.

A round table gathering veterinarians, ecologists, urban and landscape planners and biodiversity specialists should enable fair and modern co-existence of animals and humans in the Anthropocene while limiting wildlife killing to cases of euthanasia and ultima-ratio hunt.

References

Nussbaum, M. (2023). Gerechtigkeit für Tiere. Unsere kollektive Verantwortung. wbg Theiss, Darmstadt.

Huber, L. (2021). Das rationale Tier: Eine kognitionsbiologische Spurensuche. Suhrkamp Verlag.

Reichholf, J.H. (2022). Waldnatur: Ein bedrohter Lebensraum für Tiere und Pflanzen. Oekom.

27. Clinical decision-making of public zoo veterinarians in Korea: An exploratory study

*Y. Choi and M.S. Chun**
Veterinary Humanities and Social Science, College of Veterinary Medicine Seoul National University, Seoul, Republic of Korea; jdchun@snu.ac.kr

Introduction
Due to advancements in veterinary care and nutrition, zoo animals have longer lifespans compared to their wild counterparts. In Korea, the Act of Zoo and Aquarium, enacted in 2016, mandates the employment of veterinarians in institutions of certain sizes. These zoo veterinarians provide clinical care for animals experiencing age-related issues and welfare problems associated with confinement. While providing clinical care, zoo veterinarians often develop intimate relationships with the animals, forming bonds (Hosey and Melfi, 2012). The ambiguous status of zoo animals, as they are tamed yet presented as wild creatures, can create conflicts among stakeholders such as veterinarians, zookeepers, and administrators when making medical decisions in the best interest of the animals (Sathya *et al.*, 2022). Zoo veterinarians may feel frustrated and perplexed in such decision-making situations due to their emotional connections with the animals. Therefore, this study aimed to explore and comprehend the experiences of public zoo veterinarians in South Korea, focusing on their medical decision-making processes.

Methods
We conducted semi-structured interviews with zoo veterinarians who had 2 to 30 years of experience from 6 different public zoo. Each zoo had a wide range of species, from reptiles to mammals. The participants were asked about the animals under their care, the medical procedures administered to these animals, and challenging decision-making cases, including euthanasia. The interview data were analyzed using MAXQDA for thematic analysis (Braun and Clarke, 2006).

Results
Participants discussed the complex nature of their roles as both medical professionals and caretakers for their bonded animals in medical situations at the zoo. Consequently, zoo veterinarians expressed a strong desire to extend the lives of animals when confronted with critical situations that were perceived as “sudden” and “confusing.” The following themes emerged from the veterinarians’ experiences in providing critical medical care at zoos.

Maintaining an emotional distance from animals
Participants developed relationships with animals through interactions, including medical training, caring for offspring, and mutual recognition. However, unlike routine tasks typically performed by keepers, these relationships were primarily loose and indirect. Medical interventions increased the frequency and duration of physical interactions, particularly with hospitalized and elderly animals. This increased physical contact created a sense of intimacy for participants. However, they perceived this closeness as a “dangerous emotion”

and emphasized maintaining an emotional distance from them because the distance could ensure their treatment was perfect and scientific.

Compromised medical decision
Participants collaborated with zookeepers and other colleagues to minimize uncertainty in catching the animals' signs related to the diseases. They recognized the collaboration is a laborious and challenging but necessary process for decision making. Because they were concerned about the criticism of their medical treatment as "unnecessary experiments", "useless work", or "displaying sick animal", they publicized only controlled information about animal diseases and deaths respectively to animal rights groups, the media, and auditors.

Avoiding euthanasia of suffering animals
It was deemed ethical to prioritize prolonging the lives of zoo animals, even when they were experiencing unbearable pain, leading to a reluctance to consider euthanasia. Finding the cause of an illness while the animal is alive was considered important for the sake of the individual and other animals. The emotional attachment and familiarity that zoo staff had with these animals further contributed to their hesitation in deciding to euthanize them, as they preferred a natural death with alleviated suffering. Moreover, the negative perceptions of euthanasia held by the public, media, and auditors in Korea placed an additional burden on carrying out euthanasia procedures.

Discussion and Conclusion
The study findings revealed ethical concerns among zoo veterinarians in Korea. They feel compelled to distance themselves from animals as medical professionals, despite recognizing positive human-animal relationships at zoos benefit animal welfare (Hosey and Melfi, 2012). The lack of support from colleagues and institutions, coupled with strong influence of public opinion on the life and death of zoo animals, threatens their autonomy in making medical decisions. As a result, their professional justifications for decisions such as euthanasia are often inadequate (Yeates, 2010). These decisions, made under substandard animal welfare conditions at zoos, can compromise the animals' quality of life.

As of 2022, only two public zoos in Korea have implemented the Board of Animal Ethics and Welfare to address ethical concerns surrounding zoo animals. The welfare status of elderly and confined zoo animals is often overlooked as they do not capture visitors' attention. This exploratory study highlights the necessity for a framework to analyze ethical issues and establish a rationale for decision-making regarding their lives and death. Further studies should investigate the ethical ambiguity surrounding positions of zoo animals, the intersection of human interests, and the ethical perspective of clinical decision-making in zoos.

References
Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3: 77-101.

Hosey, G. and Melfi, V. (2012). Human-Animal Bonds Between Zoo Professionals and the Animals in Their Care. Zoo Biology, 31: 13-26.

Chinnadurai, S.K., de Mori, B. and Gai, J. (2022). Animals in Zoos, Aquaria, and Free-Ranging Wildlife. In: Kipperman, B. and Rollin, B.E. (eds.): Ethics in veterinary practice: Balancing conflicting interests. John Wiley & Sons, Hoboken, USA, pp. 289-307.

Yeates, J. (2010). Ethical aspects of euthanasia of owned animals. In practice (London 1979), 32: 70-73.

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Section 11

3Rs in animal research: historical, ethical, and practical perspectives

28. How are Apples and Oranges weighed in practice? On the incoherent implementation of the Harm-Benefit-Analysis as a requirement of the EU Directive 2010/63/EU.

D. Hajosi[1,2,3] and H. Grimm[1]*
[1]Unit of Ethics and Human-Animal Studies, Messerli Research Institute, University of Veterinary Medicine, Vienna, Austria; [2]Institute of Comparative Medicine, Columbia University Irving Medical Center, New York, NY, USA; [3] Columbia Center for Translational Immunology, Department of Medicine, Columbia University Irving Medical Center, New York, NY, USA; dh2906@cumc.columbia.edu

The use of animals for research purposes is regulated by several laws in detail in many countries aiming at compliance with normative standards. One of the most influential legal frameworks pertaining to the use of laboratory animals in the European Union (EU) is the Directive 2010/63/EU (Directive). Member states of the EU (MS) were required to transpose the content of the Directive into national laws by 2013. In general, the intention of the Directive was to harmonize the legislation among MS whenever animals are used for scientific purposes. However, there are certain aspects within the directive, in which a MS is given room for maneuver, and it therefore allows for some flexibility in the interpretation of its content. This may result in deviations in MS' national legislation and differences in the overall implementation and project evaluation in particular.

The Directive covers all aspects of the use of animals for scientific purposes and demands from MS to implement certain requirements. The relevant details for the project evaluation process are outlined in Article 38 and it is stated that project should be reviewed and assessed based on the overall evaluation of the objectives, severity of experiments, and compliance with the 3Rs, and it should also include a harm-benefit analysis (HBA) as an integral part of the process. The HBA, carried out by the competent authority often with the support of review committees, have to assess whether the harm to animals on an experimental study is justified by the expected outcome (Commission, 2010). The key passage of Article 38 reads as follows:

> "(...) a harm-benefit analysis of the project, to assess whether the harm to the animals in terms of suffering, pain, and distress is justified by the expected outcome taking into account ethical considerations, and may ultimately benefit human beings, animals, or the environment."

The requirement of an HBA is not only mentioned in the legally binding European Directive, but it can also be found in guidance documents by various other international organizations. Although these documents are not legally binding, they serve as a reference for institutions and committees and are therefore widely accepted as standard agreements. For example, the US National Research Council Guide for the Care and Use of Laboratory Animals represents

a generally accepted framework, which is primarily used in the US, states that "the IACUC is obliged to weigh the benefits of the study against potential animal welfare concerns". There are also multinational organizations, such as the World Organization for Animal Health, or the Council for International Organizations of Medical Sciences–International Council for Laboratory Animal Science, which maintain guidelines to emphasize on the importance of an HBA pertaining to the use of animals for scientific purposes. Also, at the EU level, the Commission (2013) has published relevant documents to navigate the projects' evaluation.

It is of vast importance for the research community to apply coherent standards to achieve harmonization in the research review process to not only achieve high quality and reproducible research, but also to ensure the highest standards of welfare for the affected animals. Although the EU has published guidance documents (Commission, 2013), including one pertaining to the project evaluation and HBA, which should facilitate the implementation of the HBA requirement successfully, it seems that it still remains not entirely clear how to carry out HBA as a part of the project evaluation (Brønstad *et al.*, 2016; Eggel and Grimm, 2018; Grimm *et al.*, 2019; Jörgensen *et al.*, 2021). Given that the implementation details on how to perform the HBA are not explicit in the Directive, we expected a variety of different approaches to implement the HBA on the national level. The main goal of this project is to investigate differences and similarities of the HBA's implementation on the practical level in European countries and MS as a key aspect of the project evaluation.

The following methods were used to achieve our goal: first, we reviewed the transposition of the Directive's HBA requirement into national laws in MS by translating the key passage of Article 38 from the respective national language into English using the translation service by Google. We have then performed a comprehensive literature search, which was looking for guidance/policy documents for the practical implementation of the HBA published by institutions and authorities on an EU and national level. In addition to the literature search, we have also contacted national committees via e-mail and inquired about such documents. Based on the findings of the search, we have then comparatively evaluated all available guidance documents. The evaluation of the guidance documents was based on the Directive's HBA requirement and by breaking it down into five separate domains:

1. Harm to the animals
2. Justification of Harm
3. Outcome
4. Ethical Considerations
5. Benefits for human beings, animals, or the environment

We were looking in detail at all available guidance documents, reviewed their content and assessed if all documents clearly define each domain and provide methods to practically include them in the HBA.

Our results are preliminary at this stage and will be presented in their final form at the conference. Briefly, we can describe, that parts of our results outline a pattern of harmonization, whereas in other aspects – especially pertaining to guidance documents and the described domains – incongruency can be observed, which finally contributes significantly to an incoherent harmonization in European laws and policy documents, that translate the HBA into practical contexts.

References

Brønstad, A., Newcomer, C.E., Decelle, T., Everitt, J.I., Guillen, J. and Laber, K. (2016). Current concepts of Harm-Benefit Analysis of Animal Experiments - Report from the AALAS-FELASA Working Group on Harm-Benefit Analysis - Part 1. Lab Animal 50(1 Suppl): 1-20.

Commission (2010). Directive 2010/63/EU of the European Parliament and of the Council of 22 September on the protection of animals used for scientific purposes. Office Journal of the European Union.

Commission (2013). Working document on Project Evaluation and Retrospective Assessment. Available at: https://op.europa.eu/en/publication-detail/-/publication/7a2f43a1-2550-11e9-8d04-01aa75ed71a1/language-en/format-PDF/source-282223752. Accessed 19 May 2023.

Eggel, M. and Grimm, H. (2018). Necessary, but Not Sufficient. The Benefit Concept in the Project Evaluation of Animal Research in the Context of Directive 2010/63/EU. Animals 8(3).

Grimm, H., Olsson, I.A.S. and Sandøe, P. (2019). Harm-benefit analysis - what is the added value? A review of alternative strategies for weighing harms and benefits as part of the assessment of animal research. Lab Animal 53(1): 17-27.

Jörgensen, S., Lindsjö, J., Weber, E.M. and Röcklinsberg, H. (2021). "Reviewing the Review: A Pilot Study of the Ethical Review Process of Animal Research in Sweden." Animals, 11(3).

29. Killing in the name of 3R?

K. Persson[1,2], C. Rodriguez[1], E. Louis-Maerten[1] and D. Shaw[1,3]*
[1]Institute for Biomedical Ethics, University of Basel, Switzerland; [2]Institute for Animal Hygiene, Animal Welfare, and Farm Animal Behaviour, University of Veterinary Medicine, Hannover, Foundation, Germany; [3] Care and Public Health Research Institute, Maastricht University, the Netherlands; kirsten.persson@unibas.ch

Introduction
The ethics of animal death and killing have entered societal, philosophical, veterinary, and legal discourses. A societal shift in human-animal relationships now support the intuition not only that inflicting pain and suffering on animals, but also killing them painlessly can be morally wrong. Furthermore, end-of-life decision-making has been identified as one of the main ethical challenges in veterinary practice (Persson *et al.*, 2020), leading to moral distress and compassion fatigue. The precise reason for this is hard to give, for lay people as well as for philosophers, who have been debating about the moral relevance of animal death extensively (Višak and Garner, 2016). Nevertheless, some animal welfare legislations adopt a framework acknowledging death as a potential harm to animals, as reflected, e.g., by the demand for a "reasonable cause" for killing animals in the German legislation. When it comes to animal research, however, laws and guidelines – including the globally implemented principles of 3R ("Reduce", "Refine", "Replace") – are currently based on a utilitarian framework, emphasizing the reduction and/or prevention of animal pain and suffering rather than animal death.

With this presentation, we suggest a classification of the cases of killing animals in the context of animal experimentation and a connection to both the public and academic discourse on animal death. Furthermore, we demonstrate how these findings relate to 3R. Finally, we conclude by suggesting a revision of some of the basic assumptions of 3R, potentially leading to the reduction of compassion fatigue and moral distress caused to decision-makers in animal experimentation.

Cases of killing animals in research
From a technical point of view, there are at least four different cases of killing animals in laboratory research.

a. Killed during experimentation

There are animals that are part of approved studies with defined "humane endpoints". The animals are either – at least *prima facie* – euthanized in the narrow sense of euthanasia, i.e., killed *lege artis* in the animals' own interest at that moment (Persson *et al.*, 2020), because after the defined endpoint suffering or harm would be unbearable if they lived on. Or, they are killed at a pre-determined point of the experiment because, e.g., the research plan includes taking their organs, tissue, or a large proportion of their blood to answer the research question. This group can be considered the unavoidable

animal deaths from a decision-maker's perspective, as killing the animals is either necessary for the experiment or for animal welfare reasons.

b. Killed in advance

There are animals who are killed before research is done with their bodies. This does not qualify as animal experimentation (Campagnol, 2022:252). The killing method is dependent on both animal welfare-related criteria and the research design. For example, animals killed with chemicals may have histopathological changes to their organs rendering them unsuitable for investigation, thus a physical method may be preferable.

c. "Surplus"

There are animals who are bred in the context of experimentations but then not used for experiments, for example, because only one sex is used, because they do not carry the relevant phenotypical properties, or because a pool of individuals is needed to keep a breeding line intact. For logistic and economic reasons, these animals cannot be taken care of until they die of other causes, which is why they are killed.

d. "Leftovers"

There are animals that were used for an experiment during which a humane endpoint prescribing killing was not reached. They do not usually suffer from pain but can no longer be used for experiments due to their past experiences and are killed for the same reason as the "surplus" animals.

Discourses on animal death

The way animals are killed during experiments (a) is a common research issue and, more recently, the effect killing procedures have on laboratory staff has been explored (Roe and Greenhough, 2023). Furthermore, the challenge of correctly defining humane endpoints is discussed. As they are not considered a part of animal experimentation, animals who are killed in advance (b) are rather neglected in the discourse. In contrast to that, animal ethicists, decision-makers in the laboratory, and the public are currently discussing "surplus" (c) and "leftover" (d) animals and offer practical suggestions on how to deal with them instead of killing them (Chmielewska *et al.*, 2015; Franco, 2016).

While those debates might share the intuition that killing animals (painlessly) is morally relevant, the spectrum of accounts on animal death in animal philosophy is rather broad: for instance, i) death as the ultimate harm for an animal subject, ii) the harm of death must be weighed against other harms like suffering, iii) death means no harm to most animals who are just living in the moment (Višak and Garner, 2016).

How does 3R relate to cases of killing animals in research?

3R is not directed at preventing animals from being (painlessly) killed as long as death is not considered a welfare issue. By applying "Reduction" and "Replacement", research indirectly aims at a decrease in the number of animals who die during/immediately after experiments (a). For animals who are killed in

advance (b), obviously, 3R does not provide guidance beyond the avoidance of pain and suffering during the killing process as this kind of research is not defined as animal experimentation. However, counting it as “Replacement” seems to “sell” those cases, presenting a contrast to the increasing consideration of death as a harm to animals in societal, veterinary and philosophical discourse. By promoting research on dead rather than living animals, the burden on those performing the killing is not reduced. “Surplus” and “leftover” animals are not included in 3R if they refer exclusively to the experiment and not to the contexts of preparation, supply, “waste”, logistics etc. However, some implementations of 3R suggest that animal-free research would or should be preferred even over research on animals that does not cause welfare issues but the animals’ death.

Conclusion

The debates on killing-related compassion fatigue and moral distress in veterinarians, animal technicians and decision-makers in animal research present further additions to the demand to include animal death as a harm in up-to-date 3R frameworks.

References

Campagnol, M. (2022). Anaesthesia, analgesia, and killing. In: Dal Negro, G.l. and Sabbioni, S. (eds.): Practical Handbook on the 3Rs in the Context of the Directive 2010/63/EU, 2022. Academic Press, London, United Kingdom, pp. 241-258.

Chmielewska, J., Bert, B., Grune, B., Hensel, A. and Schönfelder, G. (2015). Der “vernünftige Grund” zur Tötung von überzähligen Tieren. Eine klassische Frage des Tierschutzrechts im Kontext der biomedizinischen Forschung. Natur und Recht, 37(10): 677-682.

Franco, N.H. (2016). Killing of animals in science – is it always inevitable? In: Olsson, A., Araujo, S.M. and Vieira, M.F. (eds.): Food futures: ethics, science and culture. Wageningen Academic Publishers, The Netherlands, pp. 187-202.

Persson, K., Selter, F., Neitzke, G. and Kunzmann, P. (2020). Philosophy of a "Good Death" in Small Animals and Consequences for Euthanasia in Animal Law and Veterinary Practice. Animals, 10 (1): 124.

Roe, E. and Greenhough, B. (2023). A good life? A good death? Reconciling care and harm in animal research. Social & cultural geography, 24 (1): 49-66.

Višak, T. and Garner, R. (2016). The ethics of killing animals. Oxford University Press, Oxford, United Kingdom.

Section 12

Ethical reflections economic aspects in the veterinary profession

30. Impact of costs of care on animal welfare and veterinarian well-being: What should veterinarians be doing to address economic limitations of clients?

B. Kipperman
School of Veterinary Medicine, University of California at Davis, Davis, CA, USA; bskipperman@ucdavis.edu

Background
Veterinarians are faced with ethical conflicts between our desire to improve the welfare of animals and relieve suffering and our client's difficulties in meeting the increasing costs of our medical capabilities. The cost of care for small animal companions is frequently a limiting factor in the quality of medicine an animal receives. As the proportion of pet owners that have insurance coverage in the USA is very low and therefore clients must pay for veterinary services in full, and because fees are rising faster than inflation, decisions to end an animal's life based on economic factors may be increasing. In one report, 50% of dog owners indicated that cost was the primary barrier to accessing veterinary care (Park *et al.*, 2021). The Access to Veterinary Care Coalition (AVCC, 2018) report found that 72% of veterinarians agreed that the for-profit business model is not meeting the needs of all pets.

Client financial limitations compromising patient care has been documented as the most common ethical dilemma encountered by small animal veterinarians (Kipperman *et al.*, 2018). The consequences of these economic limitations are broad in scope. For animals these include reduced number of veterinary visits, delay in presentation to the veterinarian when sick, decline in quality of veterinary care received, and economic euthanasia, defined as a circumstance in which "euthanasia is elected based primarily, ...or to a large degree on the cost of veterinary ...care; or a condition in which veterinary care is sought and minimal or no testing/treatment is elected based on the costs of care, resulting in eventual euthanasia" (Kipperman, 2010).

Clients may experience emotional distress, guilt, and resentment, feeling that vets prioritize profits over patients. For veterinarians, income limitations, reduced career fulfillment, and professional burnout (defined as "an emotional state including disillusionment with one's career, depression, a diminishment of original professional motivation, an increase in resentment towards clients, or a decrease in veterinary related interests and activities") may occur.

The veterinary profession must consider difficult questions regarding its role in providing care for animals with economic need. Ethical considerations vets must contend with include: Do I have... an ethical obligation to reduce my customary fee [or allow installment payments] for clients who may not be able to afford the best care? Is it appropriate to ask clients to prove their inability to pay? Given that I cannot afford to help all clients, how do I decide which clients to help? (Tannenbaum, 1995)

This lecture will discuss results of a survey-based study to determine the opinions of small animal veterinarians regarding the frequency and degree to which the economic limitations of pet owners influence quality of veterinary care and professional career satisfaction. The study also examined to what extent veterinarians are informing and educating pet owners regarding costs of care and pet health insurance before patient illness occurs, and obstacles to veterinarian compliance in educating clients on these topics. Practitioners ranked the impact of improved client awareness of costs of care and increased incidence of pet health insurance coverage on varied aspects of practice affecting patients, clients, and veterinarians. Options for improving the detrimental influences of economic limitations on care are proposed.

Materials and Methods
The sample population included 1,122 veterinarians in small animal practice in the U.S. and Canada. The survey was distributed to 33,703 Veterinary Information Network members and 3,333 veterinarian members of the Humane Society Veterinary Medical Association.

Results
The results were published in the Journal of the American Veterinary Medical Association (Kipperman *et al.*, 2017). Of the respondents, 46% identified as practice owners and 54% identified as associate veterinarians; 69% were female and 31% were male; the median number of years in practice was 15.

The majority (57%; n=620) of respondents indicated that client economic limitations affected their ability to provide the quality of care they would like for patients in their practice every day, or multiple times per day. Approximately half of small animal veterinarians reported moderate-substantial individual degree of burnout. Clients' financial limitations impact the level of professional burnout from a moderate extent to being the primary contributor, for 77% (n=738) of respondents.

While 88% (n=932) and 91% (n=966) of respondents discussed vaccinations and spay/neuter respectively with over half of their clients, only 32% (n=329) reported discussing costs of care with the majority of their clients prior to patient illness, and only 23% (n=242) discussed pet health insurance with the majority of clients. Lack of time was cited as the primary reason for foregoing those discussions. A large majority of those surveyed reported a positive influence of improved client awareness of pet health insurance and costs of care on animal welfare, client, and professional satisfaction.

Conclusions and Action Plan
Results of the present study confirm that most small animal practitioners in the US and Canada encounter economic limitations to providing care daily, and this is a significant contributor to professional burnout. Small animal practitioners seldom broach the topic of costs of care or health insurance with clients prior to patient illness, in contrast to preventive guidance on vaccinations and gonadectomy. Lack of time was commonly cited as a limiting factor in

educating pet owners about costs of care and health insurance, suggesting that expanding appointment times during initial patient visits may be a means of improving this problem.

As the costs of veterinary care are unavailable to animal owners, veterinarians should discuss economic preparedness with all clients prior to patient illness and provide resources including information on pet health insurance. All practices should have a written protocol for addressing economic limitations. Having a policy in place better ensures a consistent approach towards financially limited clients thereby averting potential for unfairness in distributing economic resources (Tannenbaum, 1995). Such policies make it clear that the practice acknowledges the importance of this problem, encourage management to be aware of available resources including rescue groups, and reduce the emotional burden on the veterinarian to decide who should receive assistance and via which sources.

References

Access to Veterinary Care Coalition (AVCC) and the Center for Applied Research and Evaluation (2018). Access to Veterinary Care: Barriers, Current Practices, and Public Policy. University of Tennessee. Available at: https://pphe.utk.edu/wp-content/uploads/2020/09/avcc-report.pdf. Accessed 20 July 2023.

Kipperman, B. (2010). Economic euthanasia: A disease in need of prevention. Available at: https://www.hsvma.org/economic_euthanasia_disease_in_need_of_prevention#.ZExKei-B30o. Accessed 20 July 2023.

Kipperman, B.S., Kass, P.H. and Rishniw, M. (2017). Factors that influence small animal veterinarians' opinions and actions regarding cost of care and effects of economic limitations on patient care and outcome and professional career satisfaction and burnout. Journal of the American Veterinary Medical Association, 250(7): 785-794.

Kipperman, B., Morris, P. and Rollin, B. (2018). Ethical dilemmas encountered by small animal veterinarians: characterization, responses, consequences and beliefs regarding euthanasia. Veterinary Record, 182, doi:10.1136/vr.104619.

Park, R.M, Gruen, M.E and Royal, K. (2021). Association between dog owner demographics and decision to seek veterinary care. Veterinary Sciences, 8: 7. https://doi.org/10.3390/vetsci8010007.

Tannenbaum, J. (1995). Veterinary Ethics: Animal welfare, client relations, competition and collegiality. 2nd ed. St. Louis: Mosby – Year Book.

31. 'Access to care' debates: from economics to ethics

J. Desmond
University of Illinois at Urbana-Champaign, Champaign, IL, USA; desmondj@illinois.edu

Overview
In the U.S., the problem of differential access to veterinary care is increasingly recognized as a necessary subject of professional discussion, with impacts on veterinary practice and training. These discussions often center on the differences between "gold standard care," i.e. the standards of care, techniques and procedures taught in the 32 Colleges of Veterinary Medicine in the United States, and an emerging set of protocols referred to as the more affordable "spectrum of care." In these cases, the veterinarian can approach the case making their best-available diagnosis without advanced testing, and can offer alternative treatment solutions which may be less costly, if sometimes less effective. In this paper, I ask what happens when we reframe these debates not primarily as solutions to economic problems but rather in a social justice framework, that is, in a fundamentally ethical framework. Is access to care, whether for economic, locational, educational, linguistic, or other reasons, actually an issue of "justice?" Focusing on the category of "pets," I will ask whether the growing assertion by many U.S. owners that pets are "part of the family" should lead at least some veterinarians to conceive of health care for pets as a fundamental right, and/or obligation of the state or society. What sorts of shifts in veterinary practice, clinic policies, training, and community relations between veterinary professional societies and civic organizations might such a stance require? Can the "social determinants of health" model from human medicine be useful in this reimagining?

Social justice frameworks
This paper works at the intersection of multiple scientific and cultural dimensions which impact veterinary care in the contemporary United States. Specifically, I examine the intersecting discourses of social justice, changing definitions of "family," and notions of pet-keeping as a public good.

In May of 2020, the arrest of George Floyd, an African American man in Minneapolis, Minnesota, and his subsequent death resulting from the physical restraint applied by white police officer Derek Chauvin, later convicted of Floyd's murder, galvanized the nation, building on outrage from a series of previous Black deaths due to police actions, including those of Breonna Taylor, Dante Wright and Philandro Castile. Protests against police brutality spread across the nation and beyond, resulting in what *The New York Times* called the "largest protests in the United States since the Civil Rights Era." (Martinez and Arango, 2021).

The national impact of the Black Lives Matter movement, in part a response to these events, spread beyond the protests themselves. Calls for change in the unequal treatment of Blacks spread through every aspect of society from hiring

in major publishing houses, to police reform, to the curatorial choices of museum directors. This resulted from new, or renewed, commitments to fight the legacies of structural racism (in housing policy, access to public transportation, etc.) through policies promoting 'diversity, equity, and inclusion.' A widely disseminated public call for "social justice" currently serves as a national frame of reference for, and demand for, change. While previously more limited to activist circles, the current framework is now an "available discourse," that is, a concept with political legibility in multiple arenas of action. (Escobar 2008).

Pets as "family": public health and civic solutions to access to care

I consider how this available discourse of "social justice" might be used as a framework for current discussions within the US veterinary community regarding access to care debates. Key to this intersection is the increasing prominence, in the last twenty years or so, of the idea that pets are 'part of the family.' A 2015 Harris Poll survey found that 95% of the American respondents considered their pet a part of the family. Such a conceptual embrace of the 'family' concept implies a responsibility to care, and to care for, although to what extent and in what ways this is enacted varies greatly.

This duty of care links to the third strand in this analysis--the rising public acknowledgement within veterinary circles that "access to care" is a real problem for many people. Studies like *Underdogs: Pets, People, and Poverty* (Arluke and Rowan, 2020) detail the challenges faced by underserved populations, which can range from lack of money, to lack of transportation, lack of knowledge about needed care, and lack of access to clinics in home communities.

In response to client monetary needs, veterinarians now can use the framework of a 'spectrum of care' to discuss potentially less expensive (though possibly less targeted) treatment choices with their clients who cannot afford "gold standard" care. But if a social justice framework were applied rather than a purely economic one, the issue then becomes not one for individual clinicians to address, through the discounting of fees for example, but rather a civic question. Should there be community support for the health of community members' animals, or is having a pet an individual's luxury? Is the health care of privately owned animals a "public good" either because of the moral status of those animals themselves, or because of the positive ways that healthy pets are said to improve human lives? (Various research findings indicate that pets can decrease social isolation, depression, stress, and anxiety, and lower blood pressure (Manifold and Snyder, 2017).

This becomes a potential social justice issue because in the U.S. unequal access to goods and opportunities plays out along class lines, with populations of color over-represented in the lower socioeconomic classes. Experimental programs like the AlignCare Initiative, by the University of Tennessee College of Veterinary Medicine (Wise, 2023), which underwrites sliding scale vet care in poor communities in Georgia, attempt to address these inequities. To imagine

new solutions we can, I suggest, draw on human medicine's 'social determinants of health' model, by deploying that concept to embrace the health of both pets and people within a social justice frame.

References

Escobar, A. (2008). Territories of Difference: Place, Movements, Life, Redes. Duke University Press, Durham.

Manifold, S. and Snyder, S. (2017). Pets as Family—Implications for Vulnerable Populations and Access to Veterinary Care. Access to Veterinary Care: Barriers, Current Practices, and Public Policy: 53-62. Report produced by Access to Care Coalition. Available at: http:avcc.utk.edu. Accessed 20 July 2023.

Martinez, A. and Arango, T. (2021). First Witnesses in Derek Chauvin Trial Testify About George Floyd's Death. The New York Times.

Wise, C. (2023). Pets are part of the family. That makes it harder when veterinary care is out of reach. PBS News Hour. Available at: https:www.pbs.org/newshour/nation/pets-are-part-of-the-family-that-makes-it-harder-when-veterinary-care-is-out-of-reach. Accessed 20 July 2023.

Section 13

Killing animals: Legal backgrounds and moral implications

32. The moral intricacies in euthanasia for diagnostic purposes

J. Karg[1†] and E. Linder[1,2†]*
[1]Unit of Ethics and Human-Animal-Studies, Messerli Research Institute, University of Veterinary Medicine, Vienna, Austria; [2]Vienna Doctoral School of Philosophy, University of Vienna, Vienna, Austria; [*]shared first authorship; Johanna.Karg@vetmeduni.ac.at

Introduction: What is Euthanasia for diagnostic purposes?
Euthanasia is considered as both, a difficult and rewarding part of veterinary practice: If an animal no longer has any prospect of a life free of suffering and pain, there are good reasons to euthanise it. In the following, we want to address a particular instance of euthanasia that farm veterinarians face in their everyday practice in the field of swine and poultry medicine: euthanasia for diagnostic purposes (henceforth, EDP)**.** This practice involves euthanizing one or a few sick individuals to identify the pathogen infecting the larger group of animals in order to provide appropriate therapy to the infected group.

In farms with high stocking density, infectious diseases have the potential to rapidly spread over the farm and pose a threat to a vast number of animals. In cases where non or minimal invasive diagnostic samples don't provide clear results of the pathogen infecting the herd, veterinarians may consider euthanising individual animals to either necropsy them on-site or send them to a pathological institute (Ramirez and Karriker, 2019). A necropsy is in a lot of cases the most reliable way to determine the health status of the herd and to find adequate therapy for the animals. Although the aim is to care for the herd, the use of euthanasia in these situations raises novel ethical concerns: traditionally, euthanasia in veterinary ethics has been justified because it is aimed at the best interest of the individual patient, however, in the considered case the interest of one patient is jeopardised for the sake of the group. Hence, in the following we want to discuss whether and if so, how this practice can be justified, and therefore shed light on the following question: *is it wrong for veterinarians to conduct EDP?*

The problem: EDP as a moral conflict
The idea of harming one animal to benefit another, conflicts with the traditional understanding of "patient" in veterinary medicine (Grimm and Huth, 2017). Not only the herd, but also the euthanised pig is a patient and euthanising a patient, who still has a realistic prospect of a healthy and pain-free life, requires a plausible justification as it seems *prima facie* wrong. At the same time the whole herd's health is at risk. So, how should we frame this situation? One way to understand EDP is by viewing it as a case of conflicting duties: Indeed, veterinarians are guided by the positive duty to help and prevent harm and the negative duty not to inflict harm (Grimm and Huth, 2017). In this case, the veterinarian has a positive duty to assist the whole herd, while also having a negative duty not to harm individual patients against their interests. If she proceeds with EDP, she will fail to fulfill her negative duties toward the euthanised pig. Instead, if she chooses not to proceed, she will fail to fulfill her

positive duties towards the herd. Even more, she will, possibly, save the highest number of lives.

Hence the crucial question seems to be: Should the veterinarian aim at maximizing the amount of lives she can save? This view is primarily justified by utilitarians (Singer, 2011), who argue that we should pursue the course of action that yields the best consequences, and in this case the best consequences can be identified with the satisfaction of the interests of the individual composing the herd. The crucial issue is whether the veterinarian – as a professional figure – should carry the burden of conducing a utilitarian calculus and thereby infringing the very principles that ground their integrity as a professional.

Conclusion: What should the veterinarian do?

As Tannenbaum has argued (Tannenbaum, 1995: 551) veterinarians have strong reason not to become "herd doctors" but remain faithful to their core duty of not harming their patients since the very focus of veterinary medicine is the individual. And in this sense, they should avoid a doctrine such as utilitarianism. However, even if we agree with Tannenbaum that the veterinarian should not go against her principles, as this would make the very idea of professional ethics useless, such a complex scenario forces us to remark that the principles in question should not be treated as categorical and that the veterinarian might have to infringe them from time to time.

It cannot be denied that the the veterinarian is responsible for a large number of individuals all at once, therefore any measure that has negative impact on them should be carefully weighed. Indeed, there are situations in which preventive measures and the harm of a few animals can avoid a lot of suffering for many other animals, as in the case of an epidemic such as African swine fever and each case should be dealt with separately and any other possibility should be ruled out first.

We have taken a glimpse into the problem surrounding euthanasia for diagnostic purposes. At this stage of the research, due to the complexity of the problem, no definitive solution can be offered. Indeed, both ethical analysis and empirical inquiry is further required. For example, on the one hand utilitarianism has historically been under fire for its extreme demands upon moral agents (Williams 1973), on the other it should be understood whether veterinarians actually perceive such claims as too demanding. Hence, to prompt further ethical reflection, besides theoretical reflections on EDP, interviews should be conducted to further explore veterinarian's stance on the issue.

References

Grimm, H. and Huth, M. (2017). One health: Many patients? A short theory on what makes an animal a patient. In: Jensen-Jarolim, E. (ed.): Comparative medicine: disorders linking humans with their animals. Cham, Switzerland: Springer, pp. 219-230.

Singer, P. (2011). Practical ethics. Cambridge university press.

Smart, J.J.C. and Williams, B. (1973). Utilitarianism: For and against. Cambridge University Press.

Ramirez, A. and Karriker, L.A. (2019). Herd Evaluation. In: Zimmerman, J.J., Karriker, L.A., Ramirez, A., Schwartz, K.J., Stevenson, G.W. and Zhang, J. (eds.): Diseases of swine, Hoboken, NJ: Wiley Blackwell, pp. 3-16.

Tannenbaum, J. (1995). Veterinary ethics: Animal welfare, client relations, competition, and collegiality. St. Louis: Mosby Year Book.

33. “My decision needs to be the right one”: A Grounded Theory Model of veterinary killing justification

M.J. Bubeck
Junior Professorship for Medical Ethics, Faculty of Health Sciences, University of Potsdam, Germany, marc.bubeck@uni-potsdam.de

The circumstances in which veterinarians kill animals vary widely, from small animal clinics to large animal barn practices, from research laboratories to government animal disease control (Springer and Grimm, 2022; Yeates, 2022). The decision to end an animal's life may arise in each setting with its unique characteristics and considerations, influenced by factors such as regulatory frameworks, economic concerns, professional responsibilities, and the complex interplay of human-animal relationships. Understanding the intricacies and variations inherent in the different contexts in veterinary medicine in which animals are killed is critical to developing comprehensive frameworks and ethical guidelines for these difficult decisions and to promote responsible and compassionate veterinary care.

Using a Grounded Theory (GT) approach, this study aims to develop a comprehensive model identifying different justifications for the legitimisation to kil in veterinary medicine. It is an exploratory approach, recognising the limited presence of sociological research, particularly in the comparative research design focused on veterinary medicine (Bonnaud and Fortané, 2021). 17 interviews were conducted with veterinarians working in different fields of veterinary medicine. The sample encompassed individuals of diverse backgrounds: years of experience, specialities, gender, age, geographic location, and socioeconomic positions, particularly within Germany. The data collection was facilitated by a semi-structured interview guide designed to explore aspects related to participants' daily work, experiences with killing work, and personal backgrounds. The interviews lasted between 45 minutes and 2 hours and were conducted between 2020 and 2022. The subsequent analysis of the collected data followed the constructivist Grounded Theory methodology outlined by Charmaz (2014). In addition, to effectively map the heterogeneous research field, Situation Analysis (SitA) mapping strategies proposed by Clarke *et al.* (2018) were employed to provide a cartographic visualisation of the complex terrain under study. To ensure rigour and intersubjectivity in the interpretation, a dedicated GT coding group and a SitA interpretation group were established for collaborative discussion and consensus building. This collaborative effort facilitated the development of an empirical model that captures and describes the justification narratives that veterinarians use in different contexts of veterinary medicine.

The model includes five forms of reasoning. The first, medical reasoning, revolves around considerations of animal health and welfare, particularly in cases of serious injury or incurable illness, and relies on medical parameters, knowledge, and expertise. The second form, legal reasoning, involves adherence to legal regulations and guidelines, with a focus on compliance with the Animal

Welfare Act and other relevant legal frameworks. The third type, economic reasoning, involves financial considerations and conducting a cost-benefit analysis of treatment options in relation to the value of the animal's life. Relational reasoning, the fourth type, focuses on the client-animal-veterinarian relationship, considering the emotional bond and attachment between the client and the animal. Finally, moral reasoning, which is often intertwined with the other forms, involves the ethical and moral justifications for killing animals, including the definition of "good" and "'right" killing. Veterinarians rely on moral commitments and values to legitimize their practices.

However, due to the triadic structure and multiple "objects of care" (Law, 2010: 60) of veterinary medicine, conflicts may arise, such as when legal, economic, or emotional reasons conflict with medical ones. In practice, striking a balance between these different domains is essential, as the empirical examples show that veterinarians use these forms of reasoning in different combinations to navigate the complex landscape of veterinary killing. This field-comparison approach allows discussion of the moral infrastructure of animal killing in veterinary medicine.

The applicability and adaptability of the developed model to different veterinary contexts and fields in which animals are killed in veterinary medicine raise essential questions. It prompts an examination of whether this model can be extended to different situations and whether any modifications are required regarding methodology, context, aims or purpose (Yeats, 2022: 444). The multifaceted nature of veterinary care, including factors such as field of practice, status, and the ultimate goals of veterinary medicine (Springer/Grimm 2022: 483), adds complexity to the discussion. In veterinary medicine, the objects of care can vary considerably beyond the triadic relationship of veterinarian, animal, and client. The broader landscape encompassing the responsibilities and goals of veterinary practice further contributes to the diversity of perspectives and practices that surround the killing of animals (Law 2010: 60). Therefore, exploring the model's applicability in different veterinary contexts is critical to the understanding of the nuances and dynamics of animal killing and its ethical implications.

By presenting this model, the paper contributes to a better understanding of the complex factors that shape attitudes towards killing in veterinary practice. In particular, it highlights the importance of considering the different types of justification that inform decisions to kill animals. It emphasises the importance of veterinarians being aware of the social and ethical implications of their actions.

References

Bonnaud, L. and Fortané, N. (2021). Being a Vet: The Veterinary Profession in Social Science Research. Review of Agricultural, Food and Environmental Studies, 102: 125-149.

Charmaz, K. (2014). Constructing Grounded Theory. 2nd ed., SAGE, London, UK, 388 pp.

Clarke, A.E., Friese, C. and Washburn, R.S. (2018). Situational Analysis. Grounded Theory After the Interpretive Turn. 2nd ed., SAGE Publications, Thousand Oaks, USA, 426 pp.

Law, J. (2010). Care and Killing: Tensions in Veterinary Practice. In: Mol. A., Ingunn, M. and Pols, J. (eds.): Care in Practice: On Tinkering in Clinics, Homes and Farm. Transcript, Bielefeld, Germany, pp. 57-69.

Springer, S. and Grimm, H. (2020). The Future of Veterinary Ethics: History, Diagnosis, and Prognosis of an Evolving Research Field. In: Kipperman, B. and Rollin, B.E. (eds.): Ethics in Veterinary Practice: Balancing Conflicting Interests. Wiley-Blackwell, Hoboken, USA, pp. 481-500.

Yeates, J.W. (2022). Deaths. In: Kipperman, B. and Rollin, B.E. (eds.): Ethics in Veterinary Practice: Balancing Conflicting Interests. Wiley-Blackwell, Hoboken, USA, pp. 444-458.

34. Legal requirements as a source for moral problems in end-of-life situations

E. Deelen[1], F.L.B. Meijboom[1], T.J. Tobias[2], F. Koster[3], J.W. Hesselink[4] and T.B. Rodenburg[1]*

[1]Centre for Sustainable Animal Stewardship, Division of Animals in Science and Society, Department of Population Health Sciences, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands; [2]Division of Farm Animal Health, Department of Population Health Sciences, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands; [3]Department of Public Administration and Sociology, Erasmus University Rotterdam, Rotterdam, Netherlands; [4]Division of Companion Animal Health, Department of Clinical Sciences, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands; e.deelen@uu.nl

Introduction

Laws define the rights and responsibilities of veterinarians and animal owners regarding animals as well as the legal status of animals. In some situations, these legal requirements conflict, leading to problems in veterinary practice. In the context of end-of-life (EoL) situations such problems may arise. Whereas the Dutch Animal Act acknowledges animals as having intrinsic value resulting in a duty of care for both veterinarian and owner (Ministerie van Economische Zaken Landbouw en Innovatie, 2011), the Civil code defines animals as owners' properties (Burgerlijk Wetboek, 2022). Consequently, veterinarians have two legal duties: 1) to provide care to an animal if needed and 2) to obtain the owner's consent for decisions regarding their animal's medical care. In situations where an animal needs immediate care and the owner is unavailable to provide consent, veterinarians can experience problems complying with their legal duties. The goal of this research is to explore 1) how veterinarians deal with situations and 2) what effect this has on veterinarians themselves.

Methods

This research project was reviewed and approved by the Science-Geosciences Ethics Review Board (SG ERB) of Utrecht University on May 28th 2021 (reference: subject ERB Review DGK S-21552).

Study design

Semi-structured interviews were conducted with fourteen veterinarians working in small animal practices in the Netherlands. Participants were invited to share their perspectives on euthanasia of animals. As part of the interview, participants were asked to share their perspectives on a vignette concerning an EoL situation.

The vignette presents a fifteen-year-old Maltese dog who was brought to the clinic with acute dyspnoea. As you removed a malignant tumour six months ago, you worry that the dyspnoea is caused by lung metastases. The dog's owners left three days ago for a trip to Madagascar and are unreachable for consultation. The dogsitter refuses to decide whether the dog should be euthanised and is unable to tell you what the owners would want. Please share

the considerations you take into account in this situation and elaborate on the way these considerations contribute to your level of agreement with euthanasia.

Data analysis
Audio files, made with the consent of each participant, were transcribed using Amberscript™ (Version August 2021, Amsterdam, The Netherlands). The transcripts were coded using NVivo™ qualitative analysis software (Version Release 1.5.1). The analysis was conducted using an inductive approach.

Results
During the interviews, veterinarians start reasoning from a medical perspective by first assessing whether the patient's situation allows stabilization. When assessing the options to stabilize the patient, veterinarians point out three relevant pillars.

First, to serve the animal's interests veterinarians indicate to strive for the survival of the patient if the prognosis is (relatively) optimistic and the current suffering is treatable and perceived as bearable. If suffering cannot be alleviated and is perceived as unbearable, veterinarians stress the need for euthanasia. Participants describe a desire to always discuss these considerations with the owner, leading us to the legal framework as the second pillar.

The second pillar touches upon the legal framework. Participants indicate being aware of the legal requirement to obtain the owner's consent regarding the animal's medical care. If the owner is unknown or cannot be contacted, stabilizing the patient could provide more time to consult the owner. Gaining time helps veterinarians meet the legal requirement of owner consultation. Besides the legal requirement towards the owner, veterinarians also have a duty to provide care to animals in need. If the animal's situation does not allow stabilization or if stabilization is unsuccessful, veterinarians describe feeling the need to salvage the animal from ongoing suffering. In such a situation, all participants indicate euthanizing the dog without consent if the owner is unreachable within the given time. Although all veterinarians indicated they would euthanize the dog, some participants expressed uncertainty about this act. The expressed uncertainty relates partly to legal uncertainty: is it legally allowed to euthanize a severely suffering animal in an emergency without the owner's consent after attempts have been made to contact the owner? On the other hand, the expressed uncertainty relates to the follow-up with the owner, the final pillar.

The final pillar concerns the follow-up with the owner. If the owner is unavailable during the treatment, there will be a follow-up afterwards. Some participants indicated being insecure about the owner's response, especially if they would euthanize the dog without consent. Responses they fear relate to a lack of understanding leading to potential frustration or anger. Therefore, participants emphasize the need to provide owners with insights into the decision-making process during the follow-up. Participants describe that providing these insights

is always necessary, especially in cases where tempering potential anger or frustration is needed. Despite efforts to provide the needed insights, some owners remain dissatisfied with the decision and (threaten to) sue the veterinarian. Although some participants feel discomfort regarding the potential effect of acting in a situation with conflicting legal requirements on the follow-up with the owner, they express being convinced that they should act to protect the dog in the vignette, as one participant describes: "I would do everything to avoid euthanasia without the owner's consent, however, if the dog is in an extremely bad condition … I would euthanize the dog, as his welfare is most important. Though, if there is a chance I could make the dog less uncomfortable, I would prefer that option. Even though I would push for euthanasia if the owner was present, so without the owner, such a situation is much more difficult."

Conclusion

The interviews reveal that veterinarians strive to fulfil their legal obligations towards both the animal and the owner. However, if the veterinarian is unable to obtain the owner's consent when an animal needs immediate care, veterinarians will deliberately deviate from their legal requirements towards the owner. For some veterinarians, this results in a situation that is uncomfortable for them. We conclude that the current legal requirements are conflicting in particular situations and pose risks to animal welfare, good veterinary practice, veterinary well-being and owner dissatisfaction.

References

Burgerlijk Wetboek Boek 3 (2022). Available at: https://wetten.overheid.nl/BWBR0005291/2022-11-04. Accessed 24 July 2023.

Wet Dieren (2011). Available at: https://wetten.overheid.nl/BWBR0030250/2022-12-22#Hoofdstuk1_Paragraaf1_Artikel1.3. Accessed 24 July 2023.

Section 14

Caring for animals in research context: Between harm and benefit

35. Suffering for Scientific Progress. Realdo Colombo, William Harvey et al. Disregarding 3R: A Historical Survey of Animal Testing in the Light of Multispecies Ethics

S. Schreiner
University of Veterinary Medicine Vienna (Vienna, Austria) & Institute of Classical Philology, Medieval and Neolatin Studies, University of Vienna, Vienna, Austria; sonja.schreiner@vetmeduni.ac.at

Objective
Working from Realdo Colombo (approx. 1516-59) and William Harvey (1578-1657) as proponents of the scientific revolution, the talk will reach out to scientists who misused animals against modern ethical standards.

Using important texts, philosophical and religious context, and mechanistic (iatrophysical and -chemical) concepts, the presentation aims at highlighting ways ethically to reconcile scientific progress with animal welfare. It will show the limits imposed on animal testing by ethics, academic probity, and questionable validity across the species. Alongside alternative physicians who did not mistreat animals, e.g. Samuel Hahnemann (1755-1843), the founder of homeopathy, learned men such as Albrecht von Haller (1708-77), poet, scholar, and scientist (and his students) systematically instrumentalised animals for physiological findings, e.g. the function of muscles and nerves (Mémoires sur la nature sensible et irritable des parties du corps animal, 1756-60).

The lecture will explain, not extenuate or pardon the reasons for the lack of compassion in times which regarded non-human animals as unable to suffer and merely reacting to stimuli. Bettering the conditions should take generations, until the fundamental and formative, now classical description of the 3Rs by Russell and Burch appeared in 1959 (reprinted as special edition in 1992, revised and modernised in 2009).

Physiological Findings by Vivisecting Animals
Vivisection without Veterinarians
Vivisection dates back to antiquity and numbered count- and nameless victims belonging to many species, including human and non-human animals, depending on culture, political systems, and law-making. Torture, pain, and stress enabled new findings especially in human medicine, intensively researched by physicians, chemists, and natural scientists. In the selected case-studies from the 16th to 19th centuries, members of the veterinary profession were not selected for their expertise in the fields of animal welfare, veterinary ethics, or multispecies validity – with serious consequences for the fellow creatures.

Victimized Creatures for a Paradigm Shift
Harvey, physician to the British Crown, went down into history as the man who discovered the mechanism of blood circulation (Exercitatio anatomica de motu cordis et sanguinis in animalibus, 1628) and revolutionised embryology (Exercitationes de generatione animalium, 1657). Colombo, the discoverer of

pulmonary circulation and author of De re anatomica libri XV (1559), was one of his forerunners. Maltreated animals paved their way to success, progress, and new knowledge that could not have been obtained at the same pace without these experiments. Thousands of individuals belonging to countless species from frog to dog were victimized undergoing vivisection, until the experimenters achieved irrefutable evidence, including does slaughtered at different stages of pregnancy to accurately describe and picture the formation of new life.

Born and raised in times of civil war, used to savaged bodies, dead or dying, on the battlefields, Harvey did not worry about bettering the conditions of the tortured creatures by replacement, reduction or refinement. He focused entirely on his ground-breaking results – with a single solipsistic and anthropocentric exception: He agreed with Colombo who recommended adult dogs as 'objects' for experimental treatment, considering the screams of puppies (and pigs in general) as an unbearable burden to the vivisector's ears.

Fighting Diseases by Animal Testing

No Rights for Animals for the Sake of Humans

Vivisection (and anatomical studies by close inspection of dead bodies) fundamentally changed views on the mechanism of the bodily structures (cf. Andreas Vesalius' De humani corporis fabrica, 1543), but not the ethical standards for the benefit of feeling creatures. Animals continued to be 'objects' and indispensable 'instruments' in research, for the welfare of humankind, especially when bacteria or viruses were the (not fully understood) sources of life-threatening illnesses.

Against Puerperal Fever, Cholera, Anthrax, Swine Erysipelas, Rabies, and Tuberculosis without Veterinary Ethics

Throughout Europe, animals were exposed to experiments with differing results, when in the course of the 19th century researchers fought against bacterial and viral infections. The gynaecologist and obstetrician Ignaz Semmelweis (1818-65), known as saviour of the mothers, detected the origin of puerperal fever, identifying badly disinfected hands as the cause of sepsis in parturient women and their new-born babies. Heavily attacked for accusing his colleagues of having dirty hands, he tried to get irrefutable proof by experimenting on rabbits and thereby opened a fiery debate on the multispecies validity of his findings, because the genital tract of Leporidae differs from the human one.

The chemist Louis Pasteur (1822-95) and the microbiologist Robert Koch (1843-1910) widely (and not always with the desired success) experimented on animals (mainly mammals and birds) and even on themselves too, when researching immunological measures against plagues, both endangering the health and life of many species and destroying the economic output of farms in cases of epizootic diseases. The importance of their findings, but also harsh critique on their methods is scathingly mirrored in scientific discourse and in contemporary press, including crude caricatures. Edward Jenner (1749-1823) suffered a similar fate during and after his successful fight against smallpox (via cowpox).

Exclusion of Veterinarians to the Disadvantage of Animals, or the Animals' Legacy and Agency as Plea for the 3Rs

None of these scientists was a veterinarian by profession; neither did any of them consult veterinarians during extensive testing, nor respect the veterinary ethics of our times, but just those of their own times: The breathing and suffering 'test objects' simply were a means to an end without any independent value. Even if 'softer' experiments might not have succeeded in achieving valid results in many of the case-studies mentioned, the researchers of the past must undergo criticism; not so much anachronistically on the basis of today's moral standards, but for ignoring veterinary expertise. This would have helped them to understand the futility and inappropriateness of some experiments. As a logical consequence, some tests would not have been undertaken, and the number of test animals would have been reduced. However, what happened was that the misunderstanding of resilience and the misinterpretation of physiological reactions to experimental (mis)treatment distorted outcomes, thereby torturing another cohort of experimental animals. Insufficient expertise, lack of empathy, following the principle of trial and error without any sanctions, the state of the art of technical instruments, and the indomitable will to make progress made any step towards the 3Rs impossible.

References

Fuchs, Th. (1992). Die Mechanisierung des Herzens. Harvey und Descartes – Der vitale und der mechanische Aspekt des Kreislaufs, Suhrkamp, Frankfurt am Main, 297 pp.

Monamy, V. (2017). Animal Experimentation. A Guide to the Issues, Cambridge University Press, Cambridge, 126 pp. Available at: https://doi.org/10.1017/9781316678329. Accessed 29 June 2023.

Mudry, Ph. (2020). La quête du vivant ou une vie de chien. Aspects de l'investigation anatomique d'Alexandrie à Padoue. Medicina nei Secoli, 32(1): 219-234.

Perrot, A. and Schwartz, M. (2015). Robert Koch und Louis Pasteur. Duell zweier Giganten, Wissenschaftliche Buchgesellschaft, Darmstadt, 256 pp.

Russell, W.M.S. and Burch, R.L. (1992; 11959). The Principles of Humane Experimental Technique. Special Edition. Published by Universities Federation for Animal Welfare (UFAW), Wheathampstead, UK, 238 pp. Available at: https://caat.jhsph.edu/principles/the-principles-of-humane-experimental-technique (Johns Hopkins University. Center for Alternatives to Animal Testing) and https://norecopa.no/textbase/the-principles-of-humane-experimental-technique (Norecopa). Accessed 29 June 2023.

Schreiner, S. (2020). Ignaz Semmelweis. A victim of harassment? Wiener Medizinische Wochenschrift, 170: 293-302.

36. Empirical evidence of inherent impossibilities within the ethical evaluation of animal research

S. Jörgensen[1], J. Lindsjö[1], F. Lundmark Hedman[2], E. Weber[2] and H. Röcklinsberg[1]*
[1]Department of Animal Environment and Health (HMH), Swedish University of Agricultural Sciences, Uppsala, Sweden; [2]Department of Animal Environment and Health (HMH), Swedish University of Agricultural Sciences, Skara, Sweden; svea.jorgensen@slu.se

Animal research within the EU

This year, *Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes* (henceforth The Directive) has been implemented across EU member states for a decade. It emphasises respect for the intrinsic value of animals and sets the ultimate goal of fully replacing their use in research. Until then, any use of animals must comply with the 3Rs: Replacing animals whenever a reliable animal-free method is available; Reducing the number of individuals used; and Refining the methods. Ensuring that these criteria are met, and performing a Harm-Benefit Analysis (HBA) whereby the total harm inflicted on the animals is weighed against the predicted benefit of the project, are the two main tasks of the appointed competent authority and must be carried out in a transparent manner. If, and only if, the 3Rs are considered adequately fulfilled and the benefit as outweighing the harm, a project may be granted ethical approval.

Due to its nature as a so called 'implementing directive', the manner in which it has been adopted by member states into national regulations varies, something which has not been without critique (Olsson *et al.*, 2022). The European Commission Working Group has remarked that 'significant differences' between its implementations across nations are 'risking the main objectives of the Directive to deliver improved science and welfare and give a level playing field for the scientific community across the EU' (European Commission, 2017). Furthermore, studies have questioned the ethical review process itself and the overall lack of *ethical* knowledge and dialogue amongst applying researchers and competent authorities (e.g. Ideland, 2009). Some have even proposed that the HBA is an inadequate tool for ethical decision-making and that the review process as a whole needs reinventing (Grimm *et al.*, 2015, Grimm *et al.*, 2017).

Our study

Stemming from the awareness of said issues and congruous results from a recent pilot study by our research group (Jörgensen *et al.*, 2021), we have conducted a larger empirical study of the Swedish ethical review process from which selected parts will be presented at the conference. By analysing 44 sets of written documents from 2020 (corresponding to 10% of the number of processed ethical applications and decisions from the year in question) we have found that information provided by applicants pertaining to both harm and benefit vary greatly in quality and may in some cases even be severely lacking or completely left out. For example, humane end-points were only sufficiently described in five of the analysed applications and amongst the non-technical

project summaries, only one out of 44 contained a complete account of the planned harm to the animals. Hence, Sweden's competent authority, the Swedish regional Animal Ethics Committees (AECs), often do not receive the necessary information on which to base their HBAs. Despite this, ethical approval is granted in 99% of all cases.

Furthermore, ambiguities within the regulatory demands concerning the ethical approval process together with a lack of guidance documents may further impede the role of the AECs as it is not entirely clear what is expected of applying researchers or AECs for them to simultaneously live up to the demands of the Directive and national regulations.

Additionally, despite the Directive requiring the ethical review to be transparent, it is difficult to assess the depth of the ethical deliberations on which the AECs have based their decisions. The vast majority of analysed decisions do not include any mention of the specific harm or benefit associated with the reviewed project in question. Instead, a brief template statement 'The committee considers the importance of the project to outweigh the suffering of the animals' (our translation) is commonly (in 39 out of 44 decisions) all that is said on the matter. As such, it is not only unclear *to what extent* the ethical committees have performed an ethical weighing of the projects they have been tasked with reviewing, but often *if* any ethical weighing has taken place at all.

We have reason to believe that the main causes of these shortcomings, other than limited ethical training of committee members, are: the lack of guidance documents detailing how to interpret and abide by the legal framework; a hard to use digital application form; coupled with the HBA itself being difficult to achieve (and assess) in practice. Regulations are unclear as to what information should be divulged by the applying researcher and to what extent decisions by AECs need motivating in order to fulfil transparency requirements. Further, we argue that the HBA is ill-suited to be used as a one-size-fits-all model for ethical deliberation and decision-making in relation to animal research. Hence, the reasons behind why thorough ethical deliberations are not always carried out as expected may be both complex and synergistic.

Veterinarians and ethical decision-making

Human-animal interactions unavoidably birth ethical dilemmas and those related to the veterinary profession are no exception. Should an elderly dog be put down or subjected to invasive surgery allowing it to live for perhaps just the short time it has left regardless? May we kill millions of healthy animals to prevent a potential disease outbreak amongst humans? How many mice can be subjected to severe pain in order to spare other mice from suffering altogether? In these cases, a HBA-approach is commonly used to make an ethical decision, and veterinarians may take direct part in the discussions or, at the very least, must act in accordance with the verdict thereof. Common for all scenarios is that multiple interests often conflict and stakes are high. A veterinarians' role is to shed light on the situation of the animals, whereas the legislator's role is to ensure that the process as a whole and the decision-making tool in particular is

realistically applicable and fitting for its intended purpose. By continuing our research beyond the status quo, we hope to highlight challenges on both sides and to take part in improving the ethical review of animal research.

References

European Commission (2017). Commission Staff Working Document Accompanying the Document Report from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions In accordance with Article 58 of Directive 2010/63/EU on the protection of animals used for scientific purposes. European Commission, Brussels, Belgium.

Grimm, H., Alzmann, N. and Marashi, V. (2015). Taking Ethical Considerations into Account? (2015) Methods to Carry Out the Harm-Benefit Analysis According to the EU Directive 2010/63/EU. Proceedings of a Symposium at the Messerli Research Institute, 4(1). https://doi.org/10.58847/ap.1501

Grimm, H., Eggel, M., Deplazes-Zemp, A. and Biller-Andorno, N. (2017). The Road to Hell Is Paved with Good Intentions: Why Harm-Benefit Analysis and Its Emphasis on Practical Benefit Jeopardizes the Credibility of Research. Animals, 7(9). https://doi.org/10.3390/ani7090070.

Ideland, M. (2009). Different views on ethics: how animal ethics is situated in a committee culture. Journal of Medical Ethics, 35(4): 258-61. https://doi.org/10.1136/jme.2008.026989

Jörgensen, S., Lindsjö, J., Weber, E.M. and Röcklinsberg, H. (2021). Reviewing the Review: A Pilot Study of the Ethical Review Process of Animal Research in Sweden. Animals, 11(3): 708. https://doi.org/10.3390/ani11030708

Olsson, I.A.S., Nielsen, B.L., Camerlink, I., Pongrácz, P., Golledge, H.D., Chou, J.-Y., Ceballos, M.C. and Whittaker, A.L. (2022). An international perspective on ethics approval in animal behaviour and welfare research. Applied Animal Behaviour Science, 253: 105658. https://doi.org/10.1016/j.applanim.2022.105658

37. Culture of Care: On the question of animal agency in laboratory animal science

K. Ameli and S. Krämer*
ICAR3R, Justus Liebig University Giessen, Germany; Katharina.Ameli@vetmed.uni-giessen.de

Background
A majority of current debates in experimental animal science research focus to a large extent on the significance and implementation of the 3Rs principle according to Russell and Burch. In this context, the concept of the Culture of Care has come into focus in recent years, whereby relevant aspects of agency remain largely ignored. The concept of Culture of Care describes a transformation of existing routines and procedures that is characterised towards dialogical processes of negotiation and reconceptualization at all levels involved. All levels involved (management level, scientific level, nursing level, supervisory level) are understood as multipliers in the implementation of the 3Rs concept in general as well as in the implementation of a Culture of Care, in the sense of appreciation, care and the well-being of all sentient actors (Robinson *et al.*, 2019).

The concept of a Culture of Care describes in summary:

- Commitment to the implementation of the 3Rs
- Creating an appreciative working atmosphere
- Institutional engagement on behalf of animals (leadership has a key role in this)
- Motivation building and promotion of creativity of all employees
- Barrier-free communication within and between all levels of an organisation
- Remodulation of values, beliefs, attitudes
- Professional and interactional promotion of all actors
- Strengthening the self-organisation of each individual
- Lifelong learning in the sense of ongoing training programmes at all levels
- Appreciation of humans and animals (Brown, 2018; Kunda *et al.*, 2006)

However, the current debates in the discussion on the concept of a Culture of Care show that an essential discourse, namely the deeper and differentiated analysis of the perspective on the part of the animal, is largely left out (Robinson *et al.*, 2019). This exclusion reveals a major shortcoming of the conceptualisation in that the micro-perspective view of animals does not go beyond a discussion about well-being. Here, micro-perspective means an action-oriented focus on individual animals in its relations to others. Only Hermann and Jayne point out that agency is the ability to make decisions based on the animals' own interests (Hermann and Jayne, 2019).

Methods
The aim of this qualitative survey research was to analyse people's perceptions and understanding of the agency of laboratory animals. The formulation of the research question was based on the perception of the agency of laboratory animals. As the field of research on the agency of laboratory animals is currently little researched in Germany, an explorative approach was chosen. Explorative expert interviews are particularly suitable when there is little or no theoretical or robust empirical data available (Flick, 2010). Based on the theoretical reception of the Culture of Care, taking into account Russell and Burch (1959) and the construct of agency, a non-standardised survey procedure (topic-oriented, guideline-based expert interviews) was conducted with persons involved in animal experimentation at different levels (management level, scientific level, supervisory level, care level) in several organisations throughout Germany. The expert interviews provide an opportunity to capture the personal experiences and knowledge of the interviewees on the topic in narrative form as well as in semantic knowledge. A total of 15 experts in animal-based experimental research were interviewed at four levels: Management level, scientific level, supervisory level, care level. All interviews conducted were transcribed and provided with so-called memos. Care was taken to ensure that participants remained anonymous throughout. Grounded theory analysis using MAXQDA allows data collection with expert interviews to be theoretically sampled and simultaneously coded and analysed. This process is guided by theory and allowed us to approach the question of the agency of laboratory animals from the experts' perspective.

Results
The results of the qualitative interviews show a differentiated picture with relevant commonalities in the construction of a culture of care.

The management level aim, that Culture on Care does not play such a big role. Two managers had not or hardly noticed the concept before, while one manager emphasised that Culture of Care was already integrated in his understanding and everyday work for years. Nevertheless, the term agency or aspects that can be assigned to the concept are rarely named or thematically classified. The regulatory level has no deeper attention to the multi-perspectivity of the concept of culture of care and the question of the agency of laboratory animals. Culture of care is largely associated in the science level with providing animal welfare. It is therefore not surprising that an agency of animals is seen as a form of influence in principle for animals, but would not actively take place, as the following quotation states: "I do believe that animals can actually influence, but of course they do it not actively" (PhD student). The care level aim Culture of Care and the implementation of the 3Rs as largely equivalent. The construct of agency or parts of its meaning is not explicitly mentioned during the interviews either.

Overall, the results of the survey showed that the agency of animals plays a subordinate role in the question of a culture of care in animal-based research. Although all levels did not explicitly apply the construct of agency or comparable

terminology for this, there are nevertheless points of contact with the theoretical construct. Nevertheless, the interviews aim that the networks between humans and animals are recognised and that animals are thus attributed an agency in which they interact dialogically. This is justified, for example, by the transfer of emotions from carers or scientists to the animals.

Conclusions

The present survey approached the understanding of the culture of care among experts in the field of animal-based research. It became clear that the question of agency does occur in the theoretical reception of the Culture of Care model. However, this is not conclusively established in everyday practice. Rather, the results lead to the assumption that strategies are developed to largely fade out the agency of animals. The results allow the veterinary profession to reflect agency of animals and how this may affect animal science in the future of 3Rs.

References

Brown, M., Symonowicz, C., Medina, L., Bratcher, N., Buckmaster, C., Klein, H. and Anderson, L. (2018). Culture of Care. Organizational Responsibilities. In: Weichbrod, R.H., Thompson, G.A. and Norton, J.N. (eds.): Management of animal care and use programs in research, education, and testing. CRC Press: Boca Raton, Florida, USA.

Robinson, S., Sparrow, S., Williams, B., Decelle, T., Bertelsen, T., Reid, K. and Chlebus, M. (2019). The European Federation of the Pharmaceutical Industry and Associations' Research and Animal Welfare Group. Assessing and benchmarking 'Culture of Care' in the context of using animals for scientific purpose. Lab AnimL, 54(5): 23677219887998 (in press).

Russel, W.M.S. and Burch, R.L. (1959). The Principles of humane experimental technique by W.M. Russel and R.L. Burch. Methuen, London, UK.

Glaser, B.G. and Strauss, A.L. (1998). Grounded theory: Strategien qualitativer Forschung. Huber, Bern (et al.), Switzerland

Flick, U. (2010). Qualitative Sozialforschung: Eine Einführung, 2007th ed.; Rowohlt: Reinbek bei Hamburg, Germany.

Herrmann, K. and Jayne, K. (2019). Animal Experimentation: Working Towards a Paradigm Change. Brill, Leiden, the Netherlands.

Section 15

Ethically Challenging situations and approaches to deal with them

38. Analysis of ethically challenging situations faced by Korean small animal veterinarians: Applying a modified four-box approach

Y. Jung[1], S. Joo[2], Y. Choi[2] and M.S. Chun[1,2]*
[1]Research Institute for Veterinary Science, Seoul National University, Seoul, Republic of Korea; [2]College of Veterinary Medicine, Seoul National University, Seoul, Republic of Korea; jdchun@snu.ac.kr

Introduction

Veterinarians encounter a range of ethically challenging situations (ECS) in their practice. When ECS is not effectively resolved, it can result in moral stress for the veterinarian (Quain *et al.*, 2021). In such cases, the Clinical Ethics Support Service (CESS) can provide assistance by helping individuals assess complex ethical issues and make informed ethical decisions (Long *et al.*, 2022). The primary objective of this study is to identify the ECS encountered by Korean veterinarians. The aim is to understand the specific competencies required for a CESS in Korea, which can effectively address and provide guidance in these ECS.

Methods

Focus Group Interviews and overview study participants

Focus group interviews were conducted with 16 small animal clinicians in Korea. To avoid interference with a speech by workplace hierarchies, we separated the groups of practice owners and employed participants (Quain *et al.*, 2022). Of the participants, six were female, ten were male, with seven veterinarians running their practices and nine employed. Ages ranged from 20s to 50s, and the distribution of years in their clinical careers varied (Table 1). Interviews were conducted under pseudonyms with the consent of the participants, as approved by the institutional review board (SNU-IRB 2202/004-019). We identified and analyzed the ECS using “The Four-box (Four-topic) approach” (Jonsen *et al.*, 2015) through thematic analysis (Braun and Clarke, 2006) using MAXQDA.

Framework for analysis: A Modified four-box approach

The Four-box approach was modified to analyze the ethical issues in this study. According to the approach, ECS can be categorized into four topics: "medical indication," "client preferences," "quality of life" and "contextual features."

Table 1. Organising participants in a focus group interview

Session	Employment status	Female	Male	Age range
1st	Employed	3	1	20s to 30s
2nd	Practice owner	2	3	30s to 50s
3rd	Employed	2	2	30s to 50s
4th	Practice owner	0	3	30s to 40s

The "medical indication" topic uses "benefit-risk ratio" reasoning to consider the actual benefit to the patient medically. For example, medical futility and medical errors are issues in this topic. We renamed "preferences of patients" with

"preferences of clients" a topic related to patient autonomy in human medicine, reflecting the specificity of veterinary medicine. This area can address informed consent, adequacy of communication, and whether the client is making appropriate best-interest judgments as the animal's surrogate. The "quality of life" topic is originally about the patient's subjective satisfaction with life, but it would address animal welfare in veterinary medicine. For example, determining the appropriate time to euthanize a patient whose quality of life has declined is a critical issue in this area. The "contextual features" topic covers the context in which professional, familial, financial, legal, or institutional factors and various relationships influence clinical decisions. For example, organizational culture or professionalism may be addressed in this topic. The areas covered by each topic are somewhat distinct, and some issues may be considered in multiple topics. For example, euthanasia should be considered in the "medical indication" and "quality of life" topics. In this study, if an ECS was related to more than one topic, the closest topic was designated as the main topic while considering the context.

Results

The analysis identified 20 key ECS. One ECS fell within the “medical indications” topic, encompassing excessive treatments and protocols that deviated from the standard. Eight ECS were classified under the “client preferences” topic, including dilemmas associated with disclosing medical errors, conflicts between the client’s opinion and the animals’ interests, and challenges in establishing a rapport with clients. When discussing dilemma situations involving disclosing the truth, participants justified not disclosing the truth and said it was an ethically challenging situation. One ECS related to a veterinarian’s decision on euthanasia, which was included in the “quality of life” topic. Participants expressed difficulty with the criteria for euthanasia and were concerned that they might be making an rushed decision. Ten ECS were categorized as “contextual features,” covering aspects such as financial limitations, economic pressures, organizational culture, the duty to care for unowned animals, and issues related to professionalism.

Discussion

A Modified four-box approach

By matching ECS in veterinary clinical practice to the framework, this study demonstrates the potential for a modified four-box approach to be used as an analytical tool in veterinary clinical practice. However, whether replacing "patient preferences" with "client preferences," as used in our study, appropriately reflects the characteristics of veterinary practice will require further ethical review and validation. In addition, when "quality of life" is understood as just "animal welfare," it may be an ethical point to consider how reliable animal welfare status is measured by humans.

ECS of Korean veterinarians

Participants voiced their frustration over the potential implication in unethical practices during ethically challenging situations. However, they offered insufficient justifications for not disclosing the truth to clients. Furthermore,

difficulties in making euthanasia decisions were partially attributed to a lack of knowledge or understanding of animal welfare. Although the number of veterinarians studied is limited in representation, ECS of 'quality of life' in this study is a relatively small part of Korean veterinarians' perception. To understand ethical questions, veterinarians should put more weight on patients' quality of life. Lack of knowledge and experience in evaluating the welfare of animal patients could lead to this ignorance of patients' quality of life. This highlights the need for explicitly customized ethics education or animal welfare education for clinical veterinarians, regardless of the implementation of CESS. Participants acknowledged that external factors, such as financial pressures and the hierarchical culture within their practice, forced them and their colleagues to prioritize economic interests over ethical considerations. They also encountered challenges in establishing positive veterinarian-client relationships within their practices. Maintaining good relationships with colleagues sometimes led to ECS when it conflicted with professionalism. Therefore, a CESS model must address and support for ECS related to organizational culture and relationships.

Conclusion

A modified four-box approach in this study demonstrated their potential as a tool to access complex veterinary clinical ethical questions. The ECS of Korean veterinarians has a high proportion of "preferences of clients" and "contextual features" topics. In response, the CESS model must include enhancing functions for advice on establishing desirable veterinarian-client relationships and improving organizational culture. In addition, before the establishment of a CESS, continuous education on veterinary ethics education and animal welfare should be provided.

References

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2): 77-101.

Jonsen, A.R., Siegler, M. and Winslade, W.J. (2015). Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine. (8th ed.) McGraw Hill, New York, USA.

Long, M., Jenner, F., Kelemen, Z., Cavalleri, J.M., Auer, U. and Grimm, H. (2022). Case discussions in a clinical ethics support service for equine medicine: a field report. In: Bruce, D. and Bruce, A. (eds.): Transforming food systems: ethics, innovation and responsibility. Wageningen Academic Publishers, Wageningen, Netherlands, pp. 344-349.

Quain, A., Mullan, S. and Ward, M.P. (2022). "There was a sense that our load had been lightened": evaluating outcomes of virtual ethics rounds for veterinary team members. Frontiers in Veterinary Science, 9.

Quain, A., Ward, M.P. and Mullan, S. (2021). What would you do? Types of ethical challenging situations depicted in vignettes published in the veterinary literature from 1990 to 2020. Veterinary Sciences, 9(1): 2.

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39. The Veterinary Ethics Tool (VET) and developing relational approaches to veterinary ethics

V. Ashall
Science and Technology Studies Unit (SATSU), Department of Sociology, Heslington East Campus, University of York, UK; vanessa.ashall@york.ac.uk

Introduction
The Veterinary Ethics Tool (VET) describes multiple relationships that exist in the veterinary setting, and which may affect veterinary ethical decision making (Grimm *et al.*, 2018). The VET aims to facilitate clinical decision making that satisfies veterinary ethical claims regarding the prioritisation of animal welfare over and above the needs of animal owners or the profession (BVA, 2016). Responsibilities implied by the relationship between the clinician and the animal patient are thus suggested to take ethical priority over those implied by relationships between the clinician and the client, the clinician and the profession and the client and their animal. Reporting on the use of the VET to structure ethical discussion in charity veterinary hospitals, this presentation gives empirical insights into the significance and challenges of developing and applying relational approaches to veterinary ethics in practice.

Methods
A longitudinal empirical ethical study conducted in 2022 responded to calls for improved ethical discussion in charity veterinary hospitals (Wensley *et al.*, 2020). Qualitative data was generated through 9 focus group discussions (3 focus groups of up to 6 participants were conducted at 3 charity veterinary hospitals) and 15 individual interviews with charity veterinary hospital team members. A primary thematic analysis was focused on the potential for facilitated ethical discussion to reduce moral stress in veterinary teams (Ashall 2023). This secondary thematic analysis of the data explores the use of the VET to *'facilitate discussion amongst clinical staff'* (Grimm *et al.*, 2018 p. 6) with a specific focus on how the tool may develop our understanding of relational ethics in veterinary practice.

Results
Data analysis is presented as three analytic themes i) veterinary relationships and responsibilities ii) the process of ethical decision making, and iii) where/when veterinary ethics happens.

Veterinary relationships and responsibilities
The relational approach to veterinary ethics which is proposed by the VET was helpful for participants to explore the relational complexities of veterinary ethical decision making. However, they did not always feel able to prioritise the interests of animal patients in the way which is proposed, due to the complexity of their relationships with animals and animal owners. Team members sometimes felt that the interests of animals and their owners could not easily be separated, and that the interests of vulnerable owners in particular might need to be prioritised over those of the animal on occasion.

The process of ethical decision making
The VET was viewed as more helpful to structure ethical discussion between individuals than for use as an everyday decision making tool in charity veterinary practice. Participants felt that they used a similar informal process when making ethical decisions without needing to refer to the VET, however, team members saw value in using the tool to demonstrate their thought processes to others. The financial realities of veterinary charity work meant that the problem of overtreatment addressed by the VET was less relevant in this setting. Furthermore, participants felt that the tool risks oversimplification of complex aspects of their veterinary ethical decision making, including the financial capacity of vulnerable animal owners.

Where and when does veterinary ethics happen?
The participant's exploration of the VET enabled the identification of several aspects of veterinary ethics which lie outside this idealized model of clinical decision making. Team members saw veterinary ethics as involving additional relational concerns including the manner in which conversations happen, societal level regulation of veterinary practices, organizational level ethical policy and veterinary nursing. The reciprocal responsibilities of animal owners and society more broadly, which are implied by a relational approach, are considered an unclear area of veterinary ethics.

Conclusion
The Veterinary Ethics Tool (VET) is considered more useful for structuring ethical discussion than for supporting clinical decision making in charity veterinary practice. This conclusion supports other empirical findings which highlight the limited impact of decision making tools/instruments due to their inability to cover all relevant aspects in any given case. The VET helps charity veterinary team members to explore relational aspects of ethical decision making, however, the tool is not currently considered flexible enough to encompass the complexity of veterinary relationships and responsibilities in this setting (Ashall, 2022). For the field of veterinary ethics more broadly, this work provides an important empirical basis for the further development of relational veterinary ethics approaches, which acknowledge the tie between relationship and responsibility (Gilligan, 1993).

References
Ashall, V. (2022). A Feminist Ethic of Care for the Veterinary Profession. Frontiers in Veterinary Science, 9: 795628.

Ashall, V. (2023). Reducing Moral Stress in Veterinary Teams? Evaluating the Use of Ethical Discussion Groups in Charity Veterinary Hospitals. Animals. 13: 1662.

British Veterinary Association (2016). Vets Speaking Up for Animal Welfare BVA Animal Welfare Strategy. p. 1–28. Available at: www.bva.co.uk. Accessed 19 May 2023.
Gilligan, C. (1993). In a Different Voice: Psychological Theory and Women's Development. 2nd ed. Harvard: Harvard University Press.

Grimm, H., Bergadano, A., Musk, G.C., Otto, K., Taylor, P.M. and Duncan, J.C. (2018). Drawing the line in clinical treatment of companion animals: Recommendations from an ethics working party. Veterinary Record, 182: 664.

Wensley, S., Betton, V., Martin, N. and Tipton, E. (2020). Advancing animal welfare and ethics in veterinary practice through a national pet wellbeing task force, practice-based champions and clinical audit. Veterinary Record, 187: 316.