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ORIGINAL RESEARCH

Ethical challenges experienced by veterinary practitioners in relation to adverse events: Insights from a qualitative study

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Abstract

Background: Understanding ethical challenges experienced in relation to adverse events is necessary to inform strategies that optimise patient safety and practitioner wellbeing.

Methods: A qualitative exploration of UK veterinary practitioners' experiences of adverse events was conducted. Data were collected via 12 focus groups and 20 interviews and analysed using an inductive coding technique.

Results: Questions surrounding acceptable boundaries of care, decision-making autonomy, personal scope of practice, use of evidence and speaking up about patient safety concerns were identified as ethically challenging to practitioners when endeavouring to prevent adverse events. Issues of appropriate accountability, interaction and communication with animal owners and the prioritisation of emotional and technical support for themselves and others were identified as ethically challenging in the aftermath of adverse events.

Limitations: The qualitative nature of this study limits the generalisability of the findings.

Conclusions: Ethical challenges are experienced by veterinary practitioners in relation to both preventing and responding in the aftermath of adverse events. Strategies that facilitate ethical decision making and reflection and encourage openness and learning from adverse events would likely improve patient safety and enhance practitioner wellbeing. Further research is needed to develop and implement support for practitioners who experience ethical challenges in relation to adverse events.

INTRODUCTION

Adverse events refer to unintended consequences of care and are associated with complications, medical errors, negligence and professional misconduct. In-hospital adverse events are well documented in human healthcare[1,2] and there is a growing body of literature surrounding adverse event occurrence in veterinary practice.[3–6] Implicitly grounded in bioethical principles of beneficence, non-maleficence, autonomy and justice,[7–10] the concept of patient safety aims to mitigate such events.[11,12] Ethical guidance and organisation-led ethics support is a mainstay of patient safety within human healthcare[13,14] but is underdeveloped within the veterinary context.[15,16]

Ethics is a branch of philosophy concerned with the right and wrong of thoughts and actions.[17] Although veterinary practitioners in the UK are professionally bound to 'have regard first to animal welfare',[18] multiple stakeholders with an important role in patient care exist. As illustrated in the 'triangle'[19–22] and 'triangle within a square'[23] conceptualisations (Figure 1), a centralised patient–practitioner–client relationship is influenced by local practice and professional and wider socioeconomic contexts. An entrenched sense of personal responsibility for patient outcomes,[24] coupled with endeavours to respect client autonomy[25] alongside organisational values, can lead practitioners to question the right and wrong of decisions and actions. The commonality and potential of the

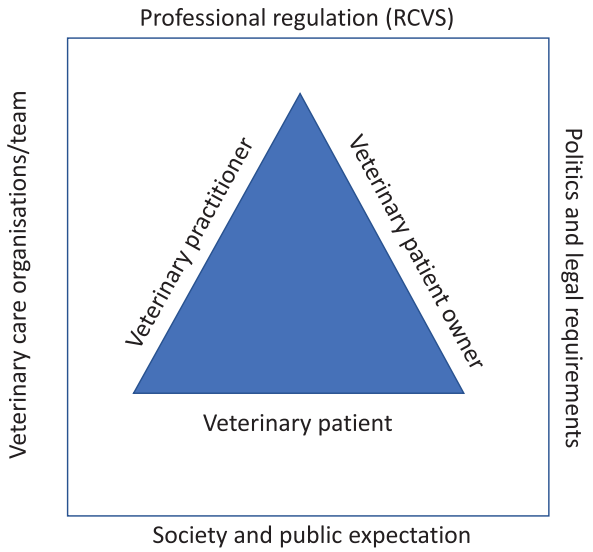

FIGURE 1 Illustration of the triangle and triangle within a square conceptualisation of the relationship between stakeholders of veterinary care

so-called ethical challenge (EC) to cause emotional distress among veterinary practitioners has previously been highlighted. In a 2018 USA-based survey study, a third of respondents rated the ECs they had encountered as highly stressful and reported a nearly daily occurrence,[26] findings mirroring an earlier small-scale study in the UK.[27]

Moral stress and moral distress may result from EC in both human[26,28–33] and animal healthcare sectors.[25,26,34–39] Moral stress is cited as a common reason for compassion fatigue[36] and moral distress, which develops when individuals are constrained in their ability to act in line with their own morals,[40–42] and has specific links to workplace attrition.[43–45] Concerningly, moral distress has also been linked to diminished patient safety in human healthcare.[46–49] Moral injury, described as a longer-term consequence of sustained moral distress,[50] is associated with post-traumatic stress disorder, depression and suicidality in military personnel[51] and may be similarly experienced by veterinary practitioners.[52] Aptly, a recent study by Williamson et al. suggested adverse event involvement as potentially morally injurious to veterinary practitioners.[53]

ECs relevant to adverse event occurrence that have previously been identified within vignettes published in the veterinary literature include those related to managing errors and complications and working with or assisting team members who are providing incompetent care.[54] Although vignettes or case scenarios may be used to exemplify experiences, the extent to which they reflect real life is unknown. Understanding veterinary practitioners' real-life experiences of ethically challenging elements of adverse events is necessary to inform strategies that mitigate adverse events and associated emotional consequences.

In a broad qualitative study aiming to build an understanding of what constitutes a stressful adverse veterinary event and to build a theory to explain their recovery process in the aftermath, 'experiencing EC' was one theme identified. Other themes identified in the study are distinct from the one presented and warrant separate publication.[16] The primary purpose of this manuscript is to provide insight into ECs veterinary practitioners experience in relation to adverse events.

METHODS

There is a paucity of research exploring veterinary practitioners' experiences of adverse events. Qualitative methods were therefore chosen because they are suited to novel areas of study and topics where in-depth exploration of feelings, emotions or attitudes is warranted.[55,56] A constructivist grounded theory approach was specifically chosen to allow for researcher 'theorising' and generation of theoretical explanations from data.[57–59] Such explanations can be used as a base for further research. Data collection and analysis occur simultaneously, with ongoing analysis iteratively informing further data collection choices. This not only lends flexibility to the research process but also allows for deeper exploration of emerging areas of importance.

This manuscript is presented in accordance with the COREQ (COnsolidated criteria for REporting Qualitative research) guidelines.[60]

Sampling and recruitment

In contrast to studies that seek to test hypotheses (where samples of randomly selected participants are appropriate), this study used a combination of two non-probability sampling techniques where researchers make choices about who to recruit as participants. Convenience sampling, where researchers recruit potential participants based on ease of access, was used to expedite the research process. Purposive sampling, where researchers make informed judgements about recruitment to produce potentially richer data, was also employed.[61]

Recruitment of participants was iterative, informed by ongoing analysis and occurred in three consecutive phases: (1) focus groups, (2) interviews with veterinary practitioners who had experienced an adverse event with an associated complaint, and (3) interviews with veterinary practitioners who specifically identified as being detrimentally impacted by involvement in an adverse event.

Recruitment of focus group participants

In October 2019, the authors used personal contacts to gain verbal permission to place advertisement posters within practices across northern England to recruit focus group participants. Veterinary surgeons, registered veterinary nurses and student veterinary nurses

were recruited (hereafter, collectively referred to as veterinary practitioners). To limit the potential effects of hierarchy, the original aim was to recruit individuals into groupings based on their professional roles and responsibilities. To explore emerging themes and to mitigate social desirability biases encountered within focus groups[62] (such as a tendency of participants to agree with more dominant members of the group regardless of the accuracy of their narrative), one-to-one interviews were concurrently conducted.

Recruitment of interviewees: veterinary practitioners with experience of an adverse event with an associated complaint

Between February 2020 and February 2021, veterinary practitioners who had experienced an adverse event and an associated client complaint within the previous 2 years were sought. Recruitment was conducted in three ways: verbal invitation by the primary author at a conference presentation about the research, via word of mouth and in collaboration with a gatekeeper at the Veterinary Defence Society (VDS; the UK's largest provider of veterinary professional indemnity insurance). Written information about the research and a description of the inclusion criteria were provided to gatekeepers who then contacted VDS members who fulfilled the criteria by phone. Gatekeepers passed on the email details of the primary researcher (J.G.) to enable practitioners to make direct contact if they wanted more information or were willing to participate.[63]

Recruitment of interviewees: veterinary practitioners specifically identifying as being detrimentally affected by an adverse event

In May 2022, veterinary practitioners were recruited via a social media post placed on Veterinary Voices (VV; a UK-based veterinary members-only Facebook Group). The recruitment post suggested the potentially stressful nature of veterinary adverse events and asked for practitioners self-identifying as being emotionally or professionally impacted by adverse event involvement to get in touch.

Data collection

Focus groups were conducted face-to-face on practice premises to allow participants to attend within working hours. Individual interviews took place via phone or videoconference call at the discretion of participants. No face-to-face interviews were offered due to nationally imposed COVID-19 pandemic restrictions at the time and for the convenience of participants.

All focus groups and interviews were conducted, audio recorded and transcribed verbatim by J.G., a female experienced veterinary surgeon and PhD candidate at the University of Nottingham, who recorded field notes at the time of data collection. Open-ended questions, which encourage respondents to elaborate on their perspectives rather than answering with a single-word answer, were asked throughout all interviews and focus groups. Guiding semi-structured interview scripts were used, but discussion was not confined, so the meaning of responses could be explored. Data collection was continued until the authors felt that 'saturation' was reached.[64,65] This was when no novel codes or themes were being developed from further interviews.

Consent and confidentiality

All focus group and interview participants received advanced written information about the research and were given opportunities to ask questions, raise concerns and decline the invitation to partake if they wished. Written consent was obtained prior to participation, which was entirely voluntary, with no incentives offered.

Only J.G. had access to the raw audio data, and transcribed files were anonymised to protect the identity of individuals and organisations. Only J.G. had access to participants' personal data, which was stored separately from the anonymised data, in a coded format and in line with the University of Nottingham's general data protection, research data management and secure data handling policies.

Data analysis

Data collection and analysis occurred simultaneously. Transcripts were imported into NVivo (QRS International, version 12, 2019), a software program used for analysing qualitative data. Initial, focused and theoretical coding were conducted through an ongoing non-linear process. Transcripts were read and lines were assigned a code based on the meaning as interpreted by the primary author (J.G.). Codes with similar meanings were grouped to produce focused codes. In a final theoretical coding step, focused codes were organised into overarching subthemes and themes. Theoretical coding embraces researchers' perspectives, gleaned from experience and literature, as tools to form explanations of phenomena.[66] A constant comparative method was used throughout the analysis[67]; raw data, codes and developing subthemes and themes were compared with each other to improve the methodological rigour and enhance the validity of the findings.[68] Constant comparative methods allow all data to be treated as a collective whole. The process was inductive and informed but not constrained by sensitising concepts[69,70] within ethics and patient safety literature. Coding was conducted by J.G. in discussion with K.W.

TABLE 1 Practice type and number and job roles of personnel attending each focus group

Focus group number	Number of participants	Type of practice and personnel attending the group
Focus group 1	6	Veterinary surgeons only. Privately owned first opinion mixed practice.
Focus group 2	7	Veterinary surgeons and registered veterinary nurses. Privately owned first opinion mixed practice.
Focus group 3	5	Registered and student veterinary nurses. Privately owned small animal referral hospital.
Focus group 4	5	Veterinary surgeo nsand registered veterinary nurses.Privately owned small animal referral hospital.
Focus group 5	8	Veterinary surgeons only. Corporately owned equine referral hospital.
Focus group 6	7	Veterinary surgeons and registered veterinary nurses. Corporately owned equine referral hospital.
Focus group 7	5	Veterinary surgeons and registered veterinary nurses.Corporately owned first opinion small animal practice.
Focus group 8	5	Veterinary surgeons (<8 years qualified). Corporately owned first opinion small animal practice.
Focus group 9	6	Registered and student veterinary nurses. Corporately owned first opinion small animal practice.
Focus group 10	4	Registered and student veterinary nurses. Privately owned first opinion mixed practice.
Focus group 11	4	Veterinary surgeons.University teaching hospital.
Focus group 12	7	Veterinary surgeons (resident and interns). University teaching hospital.

RESULTS

Participants

Focus groups

Twelve focus groups, with a total of 67 participants, were conducted across five practices between October and December 2019. The type of practices visited and personnel making up the groups can be viewed in Table 1. The initial aim was to recruit groups based on practice type and participant role. This was not always achievable due to practice time constraints groups. The duration of focus group discussions varied from 28 to 103 minutes.

Interviewees

A total of 20 individual interviews took place between July 2020 and July 2022. Eight of 10 participants contacted via VDS gatekeepers were interviewed, with two non-responders. Seven participants were recruited via word of mouth, including five practitioners (three veterinary surgeons and two registered veterinary nurses) who had experienced practice-level client complaints and two veterinary surgeons who had been subjected to a practice-level disciplinary process following a client complaint. Eight veterinary surgeons responded to the recruitment call on the VV Facebook site (for veterinary practitioners who identified as being detrimentally impacted by an adverse event), and five were interviewed. The three remaining veterinary surgeons were not interviewed due to availability and personal circumstances. To protect interview participants' anonymity, specific biographical data are not supplied here. The duration of interviews varied from 36 to 78 minutes (Table 2).

Theme: Experiencing ethical challenges

The theme 'experiencing EC' was one theme constructed during the extensive qualitative study, which sought to build an understanding of what constitutes a stressful adverse veterinary event and veterinary practitioners' recovery in the aftermath. The theme incorporated two main subthemes: ECs experienced when endeavouring to prevent adverse events and ECs encountered in the aftermath of adverse events. Exemplar quotes attained during data collection are organised under associated focused code headings. A diagrammatic overview is shown in Figure 2.

Subtheme 1: Ethical challenges experienced when endeavouring to prevent adverse events

Determining boundaries of care

Practitioners in the study used hindsight to reflect on ECs. It was common for concern to be voiced regarding justification of clinical decisions. Some practitioners perceived decisions made in the context of adverse events to have lacked prioritisation of animal welfare.

TABLE 2 Type of adverse event experienced by interview participants

Interview number	Type of adverse event experience
1–8	Adverse event with accusation of negligence and or misconduct and received advice ± legal and/or professional disciplinary representation from VDS within previous 2 years.
9–10	Adverse event with practice-level disciplinary procedure.
11–15	Adverse event with practice-level client complaint.
16–20	Adverse event with self-identified emotional repercussions.

Abbreviation: VDS, Veterinary Defence Society.

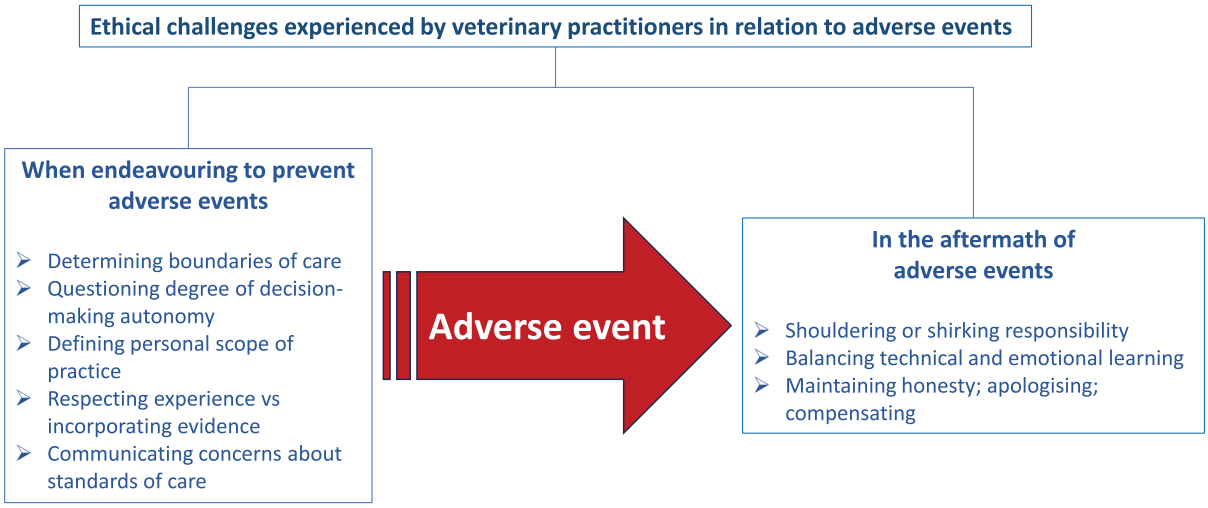

FIGURE 2 Diagrammatic overview of the theme 'experiencing ethical challenge in relation to adverse events' showing the subthemes and focused codes from which it was constructed

> *'I thought it was a welfare issue and I think increasingly we may see that. Whether we should be putting treatment into things because it's technically possible'*
>
> (Interview 3)

Dedication to the welfare of patients and the desire to provide high-quality, tailored service to clients were consistent among participants. Many articulated perceptions that their personal standards of care were often higher than legally or professionally prescribed, which led to EC.

> *'I guess the [patient welfare] needs were met on paper … it didn't sit well with me though …. I wanted not to be involved because of the risks'*
>
> (Focus group 10)

Questioning degree of decision-making autonomy

Practitioners retrospectively questioned to what extent they had control over their decision making in the context of adverse events. Social class, financial means and societal and organisational norms were commonly described as factors that unduly influenced clinical decisions. Participants gave heed to the broader issue of consumerism in companion animal sectors. Hierarchical relationships and organisational structures left some feeling complicit in providing care that did not align with their values. Cases where finances were not a limiting factor, high insurance limits were in play and where clients were perceived as misinformed about the welfare value of treatment courses due to broader organisational and societal influences were challenging for some.

> *'it's push that gold standard but sometimes, I dunno, it's not right. Things go wrong. Maybe it's just me …'*
>
> *'would you ever say that?' (facilitator)*
>
> *'no—who am I' [laughing]*
>
> (Focus group 2)

Practitioners alluded to a perception that organisations may be leveraging practitioners' well-meaning appetite to progress clinical skills and utilise technological advances. The potential for conflicting stakeholder interests to drive behaviours that increase the risk of adverse events was ethically challenging for some. An increasingly competitive veterinary market sector underpinned by economic interest was perceived as one worrying risk factor for adverse event occurrence.

> *'… I thought that they kept them [patients] going too long. I thought that ethically, I*

> *just wasn't comfortable with it and I'm not saying they're wrong they were incredibly skilled and had lots of things [technological equipment] and I take my hat off to the extra knowledge and skill and things but I just looked at them sometimes in the 24 hours hospital and would think WHAT!!!? I got my wrist slapped for euthanising patients and I thought the whole ethics at [the practice] was not right. I didn't feel like some of these things were reasonable …. I felt that things [patient lives] were being extended to extract more money and it was against what I thought was right … things were going wrong'*
>
> (Interview 3)

Defining personal scope of practice

Practitioners reflected on their own clinical knowledge and competence. Although endeavouring to advocate for the best interests of patients, practitioners found it difficult to identify when to cease with a specific course of action and retrospectively considered whether it was indeed outside their recognised scope of practice.

> *'so you wanted to refer [the case]?' (interviewer)*
>
> *'yes … but she kept giving me the "I've got no money I can't afford to do anything" story and I think the upshot of it is, I'm kind of summarising in my conclusions having been through this so many times that I ended up feeling sorry for her and said 'oh well we'll do it here then'*
>
> (Interview 4)

The EC of whether to operate outside of, or at the margins of, one's scope of practice was raised in particular reference to a duty to provide emergency treatment. Clinicians were divided on the need to be proven in an area prior to conducting work.

> *Participant 1: 'what d'ya do? YOU'RE there … you might not know if you're good enough or not but you're the best bet they've got. You try your best or you risk time … someone else in the practice might not be any better …'*
>
> *Participant 2: 'you shouldn't be doin' it if you don't know you can!'*
>
> (Focus group 10)

Respecting experience versus incorporating evidence

Concerns regarding the incorporation of conflicting peer, colleague and self-experience and published evidence were common. A young veterinary practitioner described the internal dissonance experienced when faced with conflicting advice and evidence surrounding a clinical case that later ended in adversity because of that advice.

> *'[a colleague] told me to … [they] just said you should [treat the patient with X]. I'd looked it up … I wasn't sure … but in the end, you have to, in the end I didn't know and I went with what they said even though I didn't know it to be right …'*
>
> (Focus group 8)

Other practitioners also acknowledged a disconnect between experience and evidence, reasoning that lack of published evidence and issues of accessibility and usability left them forced to make clinical decisions shaped more by anecdote than scientific evidence.

> *'I have to go with what I think we know until I can know different'*
>
> (Interview 20)

Communicating concerns about standards of care

Preventing adverse events by communicating concerns about clinical decisions and actions directly to individuals and/or to management caused considerable challenges. Practitioners clearly felt strong loyalty and a desire to safeguard the wellbeing of colleagues involved.

> *'worrying you are going to upset people and get somebody into trouble … not nice for them'*
>
> (Focus group 3)

Professionalism-related concerns were discussed cautiously during both focus groups and interviews, but the will to divulge perceived ethically unacceptable practices was strong. Voicing concerns about incivility, discrimination and bullying in the workplace was deemed particularly troublesome. Reluctance to draw unwanted attention to oneself sometimes outweighed awareness that such behaviour could ultimately risk patient welfare.

> *'I felt like I wanted to say this … that the patient was not getting the best treatment but in the end I think they would always treat me like this [previous described poor treatment by colleagues] like I didn't know as much because of the language … I didn't say anything in the end'*
>
> (Interview 15)

Experience of working alongside practitioners providing repeated substandard care was very rarely reported. When encountered, attempts to prevent and locally resolve such behaviour were unfortunately perceived to be adversely influenced by time pressures.

Many additionally feared that personal persistence in escalating concerns could risk reputation and career prospects.

> *'I've worked with [vet] a lot and [vet] was horrendous and I did bring up many things that … awful … [discussing sensitive case] … I did go to the Clinical Director about it but they were just very busy and nobody was taking any note. Nobody ever did anything about it"*
>
> *And did you? (facilitator)*
>
> *'it was hard to … I needed the job … my friends. They all loved [vet] … eventually [vet] left …*
>
> (Focus group 7)
>
> *'he was very fast. Other people were starting to complain about this particular chap … things were going wrong and who knows … he'd like retired but come back and they'd said, "Oh he's really fast". The Practice Manager loved him because of the speed'*
>
> (Focus group 7)

Subtheme 2: Ethical challenges encountered when responding in the aftermath of adverse events

Shouldering versus shirking responsibility

Some felt that leadership and management figures had recognised previous 'blame culture' within their practice. Although supportive of efforts to move away from blaming and shaming individuals, practitioners struggled with the perceived resultant lack of individual accountability.

> *'yeah it's like "oh well it's a bit bad but you know never mind" they don't want to look bad or look mean … we're struggling but I'm like oh … there's no like happy medium'*
>
> (Focus group 10)

Practitioners were inclined to take responsibility for adverse events even when they perceived to have ultimately had no control over the outcome. They also felt conflicted in doing so when they perceived that owners and/or colleagues had not taken responsibility for their actions, inactions or decisions during the care of their animal.

> *'[the client] has to meet you half way. how do you say actually this is on you?'*
>
> (Focus group 1)
>
> *'when you're there at the end … you know that there have been lots of … well … potentially not great things happening with the case before it got there … we have to take responsibility, it's only right'*
>
> (Focus group 11)

Balancing technical and emotional learning

Adverse event discussion within practices was welcomed, but many alluded to the challenge of balancing a desire to contribute or gain information about events with the risk of being perceived as unfoundedly blameful, discriminatory or bullying towards others. Dissecting perceived personal failings within group settings was particularly contentious, with the issue of what language to use and how to broach such matters without causing discomfort or even distress.

> *'you can't make a mistake and learn from it […] you can't say "you did that wrong" and for them to understand why they did it wrong which is surely better but you can't do that anymore as a manager it seems to be a no-go thing ….'*
>
> (Focus group 10)

For the many participants for whom adverse events had been emotionally challenging, a dilemma arose with respect to reaching out for support. Balancing personal emotional needs for support with external demands such as those of the organisation, peers and clients led most to feel conflicted. On the one hand, there was unmistakable awareness of the need for self-care, but on the other hand, practitioners described altruistic tendencies. A will to avoid displaying personal vulnerability was evident. Many were also apprehensive regarding the reactions of others if they were to engage in technical learning after an event. They alluded to the avoidance of questionable ability or 'losing face' if they were to admit the need for professional development in an area related to the cause of the adverse event.

> *'In all honesty I felt like I needed to go back to vet school. It was so embarrassing. On one hand I needed to just say I'm not doing that again [the type of work leading to the event] until I've done a shed load of training and can make sure I can actually do it right next time … but then I needed to get back on the horse and show that I wasn't useless … that and it didn't help that I was emotional for a long time and couldn't really keep going on about that but I was sick to my stomach about doing [type of work that lead to adverse event] again and I wanted to say that but it didn't feel like I should really'*
>
> (Interview 20)

Maintaining honesty, apologising, compensating

Practitioners admitted reluctance to openly disclose failings to clients due to concerns surrounding professional reputation and liability. This was particularly strong in cases where they perceived there to be implications for the reputation of colleagues and the wider practice in addition to themselves. Many felt a desire to apologise on a personal level but perceived apologies to increase the risk of litigation.

> *'a good old heart felt sorry often goes a long way but well you don't know, don't know, how it will be taken. Clients! … it's getting terrible … what you can say and what you can't … what they will do with it, you know? Next thing it's 'I'm suing you'*
>
> (Interview 5)

Whether it was right or wrong to financially reimburse clients following adverse events was also raised, with veterinary practitioners feeling conflicted about speaking up in the face of what they perceived to be injustice.

> *'at the end of the day, she was basically paid to leave it alone [the complaint] … not really right but I needed it [the complaint] to go away and if nothing else it did that …"*
>
> (Interview 3)

DISCUSSION

To the authors' knowledge, this is the first time veterinary practitioners' experiences of ECs specifically relating to adverse events have been reported. Veterinary practitioners were found to be ethically challenged both when endeavouring to prevent adverse events and in the aftermath. The findings suggest that, in the context of endeavouring to prevent adverse events, veterinary practitioners were ethically challenged in several ways: determining boundaries of care, making autonomous decisions, defining personal scope of practice, using appropriate evidence and communicating concerns about care. In the aftermath of adverse events, ECs experienced by veterinary practitioners were related to concerns about taking responsibility, balancing emotional and technical learning and the appropriateness of honesty, apology and compensation with regard to clients. The complex nature of veterinary care provision in which practitioners must navigate prioritisation of animal welfare against personal and economic interests is highlighted in this study. It is hoped that the findings may be used to leverage further research to formulate evidence-based support methods that practices may implement to reduce the emotional impact associated with such challenges and to improve patient safety. In this publication, the findings are discussed in the context of existing literature around two broad strategies that may be employed: facilitating ethical decision making and reflection and encouraging openness about and learning from adverse events.

Facilitating ethical decision making and reflection

The qualitative insights provided in this study focus on the issue of decision-making autonomy and the extent to which practitioners have control over their own decisions and actions, known sociologically as agency,[71] is highlighted as worthy of further consideration. While the veterinary profession recognises the importance of creating workplace systems that mitigate adverse event occurrence, individual practitioners play an essential role in maintaining ethical standards. As a large multisite ethnographic study of patient safety in human healthcare concluded, 'Individual agency is both an ethical requirement and a means of modifying systems themselves …'.[72] Creating working environments that empower participation in decision making has previously been identified as necessary for human healthcare practitioners to advocate for patients.[73]

Veterinary practitioners must navigate legal, social and professional demands, which fluctuate between prioritising the interests of animals and humans.[25,74] This was exemplified in a survey of veterinary practitioners in the USA, where although half of respondents indicated self-perceived prioritisation of patient interests, most characterised other practitioners as client prioritising.[26] Guidance that empowers practitioners to prioritise patients over potentially conflicting interests imposed by peer, client, organisational and broader societal factors may be useful in directing ethical decision making in practice. A veterinary ethics tool essentially placing the best interests of patients at the centre of clinical care and other factors, such as client–owner relationships and economic viability, as secondary, non-justifying motivators for clinical decisions was recently developed by a working party of the European College of Veterinary Anaesthesia and Analgesia.[75] The autonomous patient-focused ethical decision making such tools encourage would intuitively reduce adverse event occurrence linked to over- or undertreatment as well as the associated emotional impact, but further research is needed to explore this hypothesis.

Evidence that ethical training and reflection improve human healthcare practitioner responses to ECs exists.[47] The veterinary profession is at the forefront of exploring whether self-reflective ethical learning may have benefits over the case methods and problem-based approaches that are currently used in medical education.[76] In veterinary practice, recent studies evaluating the use of ethical discussion groups suggest that familiarisation with others' ethical perspectives and the ability to share ethical decision-making support may reduce moral stress among practitioners.[77,78] Once weekly, hour-long 'moral

de-stress' meetings are advocated by the American Animal Hospital Association.[79]

The EC of 'respecting experience versus incorporating evidence' in the context of adverse events spotlights the issue of the Aesculapian authority, where 'healing' professionals benefit from a unique entitlement to be trusted as experts.[80,81] Upcoming legislative reform, including proposals to embrace the veterinarian-led team, stimulates debate around maintaining ethical standards, the meaning of experts and the need for evidence-based practice. The recent launch of the evidence-based veterinary medicine manifesto goes some way to addressing the development, trustworthiness, accessibility and use of evidence within practice.[82] Guidelines are systematically developed statements that assist practitioners and patients in making decisions about healthcare. They offer practical application of evidence and are increasingly under development within the veterinary profession. Beyond improving patient outcomes, the availability and use of guidelines may reduce ECs experienced by practitioners in relation to treatment decisions.[83,84]

Encouraging openness about and learning from adverse events

It is posited that veterinary practitioners have an ethical responsibility to communicate concerns about factors that may threaten patient safety.[85] The challenge experienced in relation to doing so identified in this study aligns with previous work where 'speaking up' was determined as morally distressing for veterinary practitioners[86] and suggests that further work is needed to normalise such behaviour. Fear regarding personal and professional reputational damage was highlighted as a barrier to speaking up in this study. The General Medical Council provides specific advice on how healthcare workers can communicate concerns within an ethical hub of website resources.[87] Development of similar guidance for veterinary practitioners would be of potential benefit, but organisational commitment to embedding what is referred to as a 'just culture' would likely befit the profession. A just culture is one where genuine error is not punished and there is a concerted effort to learn from all adverse events. Creating a just culture is complex partly because of a lack of consensus definition or understanding of how it may be achieved.[88] Indeed, a recent study promoting learning from adverse events within an NHS Trust recommends precisely defining what a just culture means to staff, improving familiarity and transparency regarding how adverse events will be reviewed and responded to by the organisation, and enhancing learning through improved communication about adverse event review outcomes and the formation of adverse event investigation teams.[89]

Advocates of just culture approaches suggest that understanding and supporting the needs of practitioners who are emotionally or professionally affected by adverse events (i.e., second victims)[90] is essential if they are to be learned from.[91] In human healthcare, structured support for second victims[92] is based on an understanding of factors that predispose and contribute to distress as well as symptoms exhibited in the aftermath.[93] 'Experiencing EC' was identified as a theme during a broader exploration of veterinary practitioners' experiences of adverse events. Adverse events are known to have potential emotional and professional consequences for veterinary practitioners,[6] and this study highlights that experienced EC and associated moral stress may be a factor in the development of veterinary second victimhood. In human healthcare, the identification and sharing of ECs associated with concerns are suggested to have a mitigating effect.[29] As discussed, the benefits of facilitated group reflection on ethical aspects of care have recently been explored within the veterinary context and have shown promise in reducing moral stress among participating practitioners.[77,78] Provision of ethical discussion groups in practice may be warranted within future veterinary second victim support strategies.

In a previous publication, the authors evidenced strained veterinary–client relationships and complaints as both a cause and a consequence of defensive practice, which may ultimately undermine patient safety.[16] The ECs experienced by practitioners in relation to maintaining open communication, or 'candour', and apologising to clients following adverse events reported are evidenced as a potential predisposing factor. Healthcare providers in human healthcare have both a professional[94] and statutory duty[95] to be open and transparent regarding adverse events. While the Code of Professional Conduct for Veterinary Surgeons in the UK states that veterinary surgeons 'must be open and honest with clients and respect their needs and requirements',[18] specific guidance relating to appropriate levels of information disclosure, apology and support following adverse events is not available to practitioners. The will and necessity of enshrining such veterinary candour in statute is likely influenced by economics, the absence of an agreed upon moral status of animals and their legal categorisation as chattels. However, veterinary practitioners may benefit from improved professional guidance and practice-level support regarding appropriate communication with clients following adverse events.

STUDY LIMITATIONS

The qualitative methodology employed in this study facilitated in-depth understanding of this topic rather than an ability to extrapolate results that are generalisable to the greater population.[96] The iterative sampling techniques used are a benchmark of grounded theory approaches that allow exploration of themes as they are generated but lack the rigour of more systematic approaches. Reliance on snowballing techniques

introduced selection bias in this study. Focus groups and interviews produce rich data, and although findings are not restricted as they may be with survey-based methods, social desirability bias can influence outcomes. For example, veterinary practitioners with negative experiences of adverse events may have been more willing to participate in this study, which would influence the findings. The researchers are all veterinary surgeons and remained consciously aware of the potential for personal experience to influence analysis.[59] However, a limitation of this study is potential bias introduced by the possibility of researchers under- or overstating findings of interest.

CONCLUSIONS

This study provides evidence that ECs may be experienced by veterinary practitioners when both endeavouring to prevent adverse events and in the aftermath. Organisational commitment to strategies that (1) facilitate ethical decision making and reflection and (2) encourage openness and learning from adverse events are suggested as a means of improving patient safety and enhancing practitioner wellbeing. While the findings suggest the importance of supporting practitioners who are ethically challenged in relation to adverse events, further research is needed to develop and guide the implementation of evidence-based support in this area.

AUTHOR CONTRIBUTIONS

Julie Gibson conducted the study and wrote the manuscript. Kate White, Marnie L. Brennan, Catherine Oxtoby and Liz Mossop contributed to the design of the study, discussed the findings and approved the final manuscript.

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CONFLICT OF INTEREST STATEMENT

Catherine Oxtoby works for the Veterinary Defence Society as head of underwriting and pricing.

DATA AVAILABILITY STATEMENT

Transcripts contain information that may compromise the anonymity of participants and are therefore not available to be shared.

ETHICS STATEMENT

Ethical approval for the study was granted by the School of Veterinary Medicine and Science's Committee for Animal Research and Ethics at the University of Nottingham (approval numbers 2444 180724 and 3506 211202).

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