

1 Article

2 Treatment, Palliative Care or Euthanasia? Comparing 3 End of Life Issues in Veterinary and Human 4 Medicine

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8

9 **Abstract:** This is the second part of a series of two papers comparing the end of life issues in human
10 and veterinary medicine. This paper adds to the review with additional new references, taking the
11 form of an ethical argument from an independent veterinary perspective. There are some
12 fundamental differences outlined such as patient communication, finance and 'conflicts of interest'
13 between animal, owner and veterinarian but many striking similarities between human and
14 veterinary issues such as assessing quality of life and the primary role of the attending veterinarian
15 or doctor being the welfare and care of the patient. Clinical veterinarians are well trained in the
16 ethics of euthanasia and are experienced in its use on a daily basis in the best interest of their animal
17 patients. Doctors in the UK are limited and unwilling to put forward a case for the option of
18 euthanasia for those patients who could face a slow and agonizing death due to refractory
19 symptoms. With advances in medical science being able to significantly prolong the dying process,
20 autonomy for the patient demands a review of the law regarding patient choice in the UK at the end
21 of life.

22 **Keywords:** euthanasia; veterinary ethics; medical ethics; end-of-life; assisted suicide; palliative care;
23 assisted dying; moral stress.

24

25 1. Introduction

26 A retired surgeon from Australia who has been giving lectures and running workshops on end
27 of life issues for the last 20 years, believes that the space between being ready to die and actually
28 dying is a time of great suffering [1] (p. 118). Indeed, one of the key findings of the legal and social
29 issues committee of the Victoria Parliament in their inquiry into end of life choices, was that
30 'Prohibition of assisted dying is causing some people great pain and suffering. It is also leading some
31 to end their lives prematurely and in distressing ways' [2] (p. xx).

32 In a climate of enhanced patient autonomy, patients wish to retain control of their lives until
33 they die. Medical practitioners are increasingly likely to encounter patients seeking assisted dying
34 [3].

35 The aim of this article is to assess whether human medicine should join veterinary medicine by
36 including euthanasia as a legal end of life option. As the availability of an assisted death is wanted
37 by the majority of the UK public [4], but resisted by the medical profession [5] and the Government
38 [6], can the experiences and values in veterinary medicine help sway the Government to change the
39 law in the UK for the benefit of human patients so they can be assisted to die at a time of their
40 choosing?

41

42 **PICO Question.** Would terminally ill patients in the UK benefit from the option of a medically
43 assisted death, as in veterinary medicine and some foreign countries and states where voluntary
44 suicide/ euthanasia has been legalized?

45

46 The main conclusion of this paper is that euthanasia of the terminally ill patient is a humane
47 option if ending the life of the patient is desired by the patient and will prevent additional suffering
48 and unnecessary pain and therefore should be included as a legal end of life option in the UK.

49

50 2. The evidence

51

52 The relevant papers found were documented in the as yet unpublished Review [7], with some
53 additional references in this article providing fresh evidence.

54

55 3. Discussion

56

3.1. Exclusions

57

58 A discussion about the justification for destroying healthy animals to control stray animal
59 populations or for Notifiable Disease Control purposes or for aggressive/dangerous dog control,
60 does not come under the remit of this debate.

61

62 Nor does ethical dilemmas about turning off life supporting treatments in Intensive Care Units as
63 this situation is not encountered in veterinary medicine and is already adequately dealt with within
64 the law.

65

66 3.2. Comparing end of life issues in veterinary and human medicine

67

68 3.2.1.

69

70 Is this a valid and fair comparison?

71

72 There are many who would dismiss the comparison of human and animal end of life issues as
73 being irrelevant [8]. This is perfectly understandable if they have never valued the life and love of an
74 animal and witnessed the suffering of a loved one. Whereas those who have had both experiences
75 can testify that there is much to be learnt from the comparison.

76

77 Bachelard has written a paper putting forward the philosophical argument that it is wrong to
78 draw conclusions about euthanasia in humans by comparing it to the relief of suffering of animals.
79 She argues that by putting humans out of their agonizing suffering we would be reducing Homo
80 sapiens to the level of an animal. Although she agrees that we have evolved from animals, she argues
81 that it is the development of a fellowship society with moral values that makes us distinct. The doctor
82 looking at his/her patient recognizes that the patient shares the same properties as him/herself with
83 the same significance and human fate. Yet she states that 'since there is no empirically relevant
84 difference between human beings and animals in terms of our capacity for suffering, then there can
85 be no warrant for differential treatment of like cases as long as those involved freely consent to the
86 act of euthanasia' [9] (p.136). 'How does this discussion connect to the agonizing physical and mental
87 suffering that is at issue in the argument from mercy?' She argues that the analogy between humans
88 and animals obscures the fact that most human suffering is an aspect of the human condition to which
89 we may respond in varying ways, with varying degrees of lucidity, depth, honesty and courage. She
90 agrees that there will certainly be many cases, in which no third party, no non-sufferer, has the right
to expect the sufferer to respond deeply to the suffering, to be adequate to their suffering, to make
anything of it in their lives. 'The recognition that theirs is a human misfortune, a human tragedy,
must condition what it is that we do to them' [9] (p. 138).

91

92 She concludes by saying, 'there remains the possibility of merciful killing which does not demean
the individual for whose sake it is done. Euthanasia then may be done in a spirit alive to the sense of

91 the depth and meaning of this life and its suffering.' Human beings are individuals in possession of
92 inner lives capable of ever deepening responsiveness to one another and to the human condition [9]
93 (pp. 138-139).

94

95 3.2.2.

96 The major **differences** between veterinary and human medicine, when comparing end of life issues,
97 are that:

98 1. Animals **cannot talk nor prepare an 'advance directive'**, however vets are trained how to assess
99 their condition and needs.

100 'An "advance directive" enables competent individuals to design and document their health
101 care decision plan in advance in case of future disability or terminal illness' [10].

102 2. **Financial concerns may** come into the equation more for animal treatments. Although in cases of
103 futile treatments, healthcare providers also have to consider the allocation of limited resources
104 available to manage the case scenario so as to avoid inequity [10]. 'They have to address the issues
105 of unnecessary and unequal distribution of resources by withdrawing or withholding futile
106 treatment' [11,10].

107 3. Human medicine has become less '**paternalistic**' and more towards 'autonomous decision
108 making'. 'The healthcare professional should respect the **patient's autonomy** while considering
109 its [legal] limitation and carry out their duties to benefit the patient without doing harm. The
110 physician has a duty to preserve a patient's life but this duty is not to be confused with
111 unnecessary use of resources and inflicting more harm than good to the patient by continuing
112 medically futile treatments' [11,10]. 'Communication between patient and families, discussing
113 the patient's goal regarding treatment and care, can be helpful to bridge a gap between the
114 patient, their families and the physician' [12]. In veterinary medicine concerns about
115 autonomy and informed consent include considerations about the veterinarian's obligations
116 to the animal versus the client and issues arising from veterinary and client differences in
117 assessing animal welfare [13].

118 4. Thus 'the status of animals as the property of their owners makes veterinary medicine fraught
119 with competing interests, and these "**conflicts of interests**" generate difficult ethical
120 quandaries for clinicians. For example even if it were possible to accurately determine the best
121 interest of the horse in a particular case of laminitis, it is unlikely that this factor would be the
122 only one in making a treatment decision. Veterinary medicine rarely has the luxury of focusing
123 solely on the well-being of the animal. It is a branch of medical practice that has conflict of
124 interest issues embedded in its very structure, with clinicians having dual (and often
125 conflicting) loyalties to both patients and clients' [14] (p.106). I personally would like to
126 hypothesize that it is this 'conflict of interests,' added to the stress and anxiety associated with
127 providing an out-of-hours service at all hours of the day and night, which is behind the
128 extraordinarily high rate of suicide amongst practicing veterinarians.

129

130 Platt et al. [15,16], did a systematic review of the prevalence of suicide in veterinary surgeons
131 and concluded that the risk was at least three times that of the general population in the UK
132 and the risk is also elevated in some other countries. Access to methods, including weapons
133 and pharmaceutical agents is a common factor in deaths of veterinarians. The possibility that
134 familiarity with convenience animal euthanasia may increase the likelihood of suicide is
135 disputed by Ogden et al. [17]. They conducted a survey of preclinical and clinical veterinary
136 students and recent graduates, looking for a relationship between attitudes to convenience
137 animal euthanasia and human euthanasia or suicide, and found none.

- 138 5. For humans '**fear of death** has a primary role of physical self-preservation.' 'To permit normal
139 psychological functioning, denial/repression puts the fear of death on a back burner.' [18] (p.
140 224). 'A man will say, of course, that he knows that he will die someday, but that he does not
141 really care. He is having a good time living, and he does not think about death and does not
142 care to bother about it – but this is a purely intellectual, verbal admission. The effect of fear is
143 repressed' [19,18]. This 'denial of death certainly decreases with age' [18]. Animals do not
144 seem to have an innate fear of dying. Veterinarians believe that prior to euthanasia they do
145 not sense nor fear imminent death. Whereas humans are aware of their mortality and this self-
146 awareness elicits crippling existential anxiety [20]. Many humans are afraid of death, both of the
147 unknown and of the actual dying process. It is this fear of the dying process that can be relieved
148 by euthanasia as their fears of any accompanying pain, or distress due to choking and suffocation,
149 can be dissipated by a controlled death.
- 150 6. Some **human cultures** have strong views about euthanasia and end of life choices, for example,
151 the idea that brain death in Islamic law does not constitute the end of life as the soul is still present
152 in the body, forbids the use of euthanasia [21]. Jehovah's Witnesses are allowed to forego life
153 sustaining blood transfusions as they believe this will give them a better chance of enjoying
154 eternal paradise. We respect these patients' autonomy [1]. Catholic moral theology views
155 euthanasia and physician assisted suicide as a direct negation of the precious gift of human life
156 [22].
157 Animals are not religious and do not share these beliefs.

158

159 3.2.3.

160 There are many striking **similarities** between end of life issues in veterinary and human medicine.
161 These include: making the decision, refusing treatments, quality of life, loss of dignity, the guilt, the
162 welfare and care of the patient, ethical challenges, moral stress and cognitive dysfunction
163 syndrome.

- 164 1. Veterinarians encounter the problem of **making the decision** to end an animal's life when the
165 desires of the human guardian are often difficult to identify [23,24]. Likewise in human
166 medicine when the patient is incapacitated often the primary carers are very bad at making end
167 of life decisions [10], so it is up to the doctor to guide the way. Pochard et al. concluded that
168 more than two-thirds of family members visiting patients in intensive care units suffer from
169 symptoms of anxiety or depression which could affect their decision-making capacity, therefore
170 involvement of anxious or depressed family members in end-of-life decisions should be
171 carefully discussed [25].

172 In modern day veterinary practise, owners vary from those being totally reliant on the
173 veterinarians' advice, through to increasingly, those who are used to making their own
174 decisions based on best information available [13]. Human equipment for decision-making
175 stems from multiple levels of consciousness: intuitive, driven by subconscious processes; gut
176 level, driven by adrenal hormones; cognitive and uniquely rational; and cognitive but socially
177 influenced in complex ways, [26]. Situations where owners found decision-making more
178 difficult were: the lack of a clear cut-off point in cases with slow deterioration, or fluctuating
179 levels of health. Other conflicts arose when humans identified with the dog's condition [13].
180 Here euthanasia could be postponed as it raised complex questions, too tough to deal with,
181 about human patients in similar situations. An example:

182 *"My husband was ill and he found it very difficult that we should part with the dog, because he*
183 *thought, well, now she is ill and old and then you just get rid of her, and maybe he felt it was a bit*
184 *like that with him too," (owner of euthanized old dog with dementia).*

185 Finally, conflicts sometimes arose between family members who disagreed over the choice of
186 treatment or about the timing of euthanasia for their pet [13].

187 2. **The guilt** human guardians feel about their power of life and death over their beloved animal
188 companion [27], means that taking responsibility for ending the animal's life and the feeling of
189 being an executioner are hard for some owners to bear. Although acknowledging that decisions
190 about euthanasia were their responsibility, making this decision sometimes felt wrong and
191 made the owner feel like a bad person for taking a life. Although the one situation they
192 probably feared the most was one in which they had let their pet suffer [13].
193 This guilt also extends to the vet performing the euthanasia and other carers [28].

194 This is something which would need to be addressed to support family members and health
195 professionals involved in end of life decision making of dying humans, were euthanasia to be
196 introduced as an option. However, personal autonomy must be respected, Landry et al. ask:
197 'Does respect for patient autonomy also require that patients have choices concerning the
198 method of assistance in death, or euthanasia? In other words, will the method of PAD be strictly
199 regulated, or negotiated between physician and patient?' [29] (Section 4.1). I personally would
200 like the patient to have a choice between either ingesting a bitter, foul tasting medicine as their
201 last ever drink or being able to say or indicate - 'I'm ready' seconds before feeling drowsy and
202 losing consciousness.

203 3. An animal patient '**refusing treatments**' is frequently encountered in veterinary medicine and
204 surgery, to the extent that some medications need to be administered by the vet or owner, as
205 being in the best interests of the animal. It is however the similarities between the owner of the
206 animal and the human patient refusing treatments which enters into this discussion. The
207 emotional bond between the client and the animal patient may be so strong, and the immediate
208 situation so confusing, that a client may be unable or unwilling to critically appreciate the
209 prolonged suffering a treatment modality might produce. It is the responsibility of the
210 veterinarian to guard against the owner wishing to continue with treatments, at the expense of
211 the patient's quality of life. The existence and availability of a therapeutic or diagnostic
212 modality is not an ethical argument for its use [30]. In human medicine often close family
213 members feel the same way but more often than not it is the patient who refuses the treatment,
214 very often accompanied by the refusal of food and water. This frequently occurs near the end of
215 life when the patient who wishes to depart this life has no other option.

216 4. **Quality of life.** In order to assess quality of life Nieburg and Fischer suggest asking the human
217 guardian whether the animal can do the things that he or she once enjoyed; whether there is
218 more pain or more pleasure in his or her life; whether the animal has become bad-tempered and
219 snappish as a result of old age or illness; whether the animal has lost control of his or her bodily
220 functions [31,24].

221 Folger et al. state that 'the veterinarian must make every effort to assist the patient to enjoy
222 the Five Freedoms:

223 FREEDOM FROM HUNGER AND THIRST.

224 FREEDOM FROM DISCOMFORT.

225 FREEDOM FROM PAIN, INJURY OR DISEASE.

226 FREEDOM TO EXPRESS NORMAL BEHAVIOR.

227 FREEDOM FROM FEAR AND DISTRESS.

228 Quality of life considerations should remain a continuous dialogue between the veterinarian and
229 the client' [30].

230 Vets are constantly monitoring the quality of life of their patients and trying not to neglect any
231 animal, this includes captive animals in zoos. In an article about quality of life in geriatric zoo
232 animals, Follmi et al. discovered that many geriatric captive animals outlive their life
233 expectancy in the wild and as a result suffer from many conditions mainly related to the
234 musculoskeletal system and neoplasia, and despite the best treatments available, this
235 compromises their quality of life and welfare. They have developed a comprehensive scoring
236 system for the different species of animals found in zoos, to help veterinarians arrive at
237 informed decisions regarding the best time for euthanasia to prevent further suffering [32].

238

239 In human medicine how can quality of life be maintained whilst under deep palliative
240 sedation? Are the doctors and physicians merely maintaining quality of death? They are not
241 shortening life, as concluded by Maltoni et al. in a systematic review, 'palliative sedation, when
242 appropriately indicated and correctly used to relieve unbearable suffering, does not seem to
243 have any detrimental effect on survival of patients with terminal cancer' [33] (p. 1378).

244 'Median survival (survival was defined as the number of days from hospice/hospital admission
245 or from the start of home care to death) of sedated and non-sedated patients varied from 7 to
246 36.5 days and from 4 to 39.5 days, respectively; this was not statistically different between the
247 two patient groups' (p. 1379). 'Palliative sedation can therefore be considered as an integral
248 part of the palliative medicine approach to end-of-life care' [33] (p. 1382).

249 However, Beller et al. found that evidence is lacking on the success of controlling symptoms
250 adequately with palliative sedation and 'No studies measured the primary outcome of this
251 review, quality of life or well-being, in a formal way. Many of the study reports discussed the
252 "settling" of symptoms in an anecdotal way; however, there were no quantitative reports' [34]
253 (p. 15). 'Terminally ill people experience a variety of symptoms in the last hours and days of
254 life, including delirium, agitation, anxiety, terminal restlessness, dyspnoea, pain, vomiting, and
255 psychological and physical distress. In the terminal phase of life, these symptoms may become
256 refractory, and unable to be controlled by supportive and palliative therapies specifically
257 targeted to these symptoms. Palliative sedation therapy is one potential solution to providing
258 relief from these refractory symptoms' [34] (p. 3). However, 'The results demonstrated that
259 despite sedation, delirium and dyspnoea were still troublesome symptoms in these people in
260 the last few days of life. Control of other symptoms appeared to be similar in sedated and non-
261 sedated people' [34] (p. 4).

262 In a recent study from France, health care providers found that in many cases midazolam
263 failed to provide relief from some refractory symptoms. Also deep sedation broke down the
264 patient/carer relationship [35].

265 UK doctors are monitoring and treating pain and symptom management under the umbrella
266 of palliative care but in most cases are failing to assess quality of life as they have no armoury
267 to do anything about it when it becomes unacceptable to the patient.

268 5. **Loss of dignity.** Suffering can be both physical and emotional for man and beast. Even animals
269 appear to be aware of 'loss of dignity,' for example, when they are unable to fulfil normal
270 toileting behaviour which is both instinctive and instilled into them from training in their early
271 days. Also, existential suffering in humans is not relieved by the treatment of physical
272 symptoms alone. Loss of dignity and a feeling that they have outlived their time, can cause
273 existential suffering that is unremitting and of such depth that more often than not the patient is
274 sedated. I would like to define 'existential suffering' as 'a profound fear of existing but losing
275 control of body +/-or mind unwillingly'.

276 6. **To compare** the similarities in **the ethics** involved in end of life issues between veterinary and
277 human care at the end of life in the UK, it is useful to compare the Veterinary Oath taken when
278 becoming a member of the Royal College of Veterinary Surgeons in order to practise, and the
279 General Medical Council's guidance on the duties of a good doctor, the closest thing to a
280 modern Hippocratic Oath, under the title 'Good Medical Practice' [36].

281 **The welfare of the patient**

282 It is the ethical and moral responsibility of every veterinarian to advocate the welfare of the
283 patient. This is the veterinarian's primary responsibility [30].

284 On admission to membership of the RCVS, and in exchange for the right to practise veterinary
285 surgery in the UK, every veterinary surgeon makes a declaration, which, since 1st April 2012,
286 has been:

287 "I PROMISE AND SOLEMNLY DECLARE that I will pursue the work of my profession
288 with integrity and accept my responsibilities to the public, my clients, the profession and
289 the Royal College of Veterinary Surgeons, and that, ABOVE ALL, my constant endeavour
290 will be to ensure the health and welfare of animals committed to my care" [37] (p. 14).

291 **The care of the patient**

292 Here are the duties of a doctor, registered with the General Medical Council, relevant to end of
293 life care:

294 'Make the care of your patient your first concern. Take prompt action if you think that
295 patient safety, dignity or comfort is being compromised. Work in partnership with patients:
296 Listen to, and respond to, their concerns and preferences. Respect patients' right to reach
297 decisions with you about their treatment and care' [36].

298 A small study, done in 2001, of doctors reflecting on how they learnt to truly care for dying
299 patients in New Zealand, revealed that their training had been inadequate in preparing them
300 for such care [38].

301 7. **Ethical challenges** about end of life issues and dealing with requests for euthanasia in
302 particular, are confronting both doctors and veterinarians on a daily basis. If a client requests
303 that a veterinarian should euthanize a healthy animal, the vet can refuse, despite the owner
304 being within his or her legal rights to make such a request.

305 In a national survey, carried out by Meier et al. of physician-assisted suicide and euthanasia
306 in the United States, prior to any legalization, the 81 respondents (weighted proportion 6.4%)
307 who reported having acceded to at least one request for assistance with suicide or a lethal
308 injection were asked to describe the most recent case. 47% of these respondents wrote a
309 prescription for the purpose of hastening death, and 53% administered a lethal injection. The
310 perceived reasons for the request were: discomfort other than pain (reported by 79% of the
311 respondents), loss of dignity (53%), fear of uncontrollable symptoms (52%), actual pain (50%),
312 lost meaning in their lives (47%), being a burden (34%), and dependency (30%). The reasons
313 given for acceding to the request were: severe discomfort other than pain (reported by 78% of
314 the respondents), refractory symptoms (72%), a life expectancy of less than six months (69%),
315 and severe pain (29%) [39].

316 8. Moral Stress

317 Rollin states that 'Euthanasia is a double-edged sword in veterinary medicine. It is a
318 powerful and ultimately the most powerful tool for ending pain and suffering. Demand for its
319 use for client convenience is morally reprehensible and creates major moral stress for ethically
320 conscious practitioners. But equally reprehensible and stressful to veterinarians is the failure to
321 use it when an animal faces only misery, pain, distress, and suffering. A recent study published
322 in England confirms that suicide among veterinarians is higher than in any other profession. In
323 the 1980s, Rollin identified a problem that is pervasive among humane society and animal
324 shelter workers, laboratory animal personnel and veterinarians and called it "moral stress,"
325 which is a unique and insidious form of stress that cannot be alleviated by normal approaches
326 to stress management. It arises among people whose life work is aimed at promoting the well-
327 being of animals, yet in far too many cases, their major activity turns out to be killing unwanted
328 dogs and cats. Most veterinarians enter the field to treat disease, alleviate pain and suffering,
329 and provide high-quality of life for the animals to whom they minister. Yet historically,
330 veterinarians, like humane society workers, have been called upon to kill unwanted animals.
331 This state of affairs creates moral stress which grows out of the radical conflict between one's
332 reasons for entering the field of animal work, and what one in fact ends up doing' [40] (p. 651).

333 It begs the question: Is the BMA more interested in protecting its members from moral
334 stress than relieving the suffering of patients and their loved ones? 'BMA policy insists that if
335 euthanasia were legalised there should be a clear demarcation between those doctors who
336 would be involved in it and those who would not' [41]. It is ironic that one of the key reasons
337 given for why current BMA policy firmly opposes assisted dying is that in their view,
338 permitting assisted dying 'would be contrary to the ethics of clinical practice, as the principal
339 purpose of medicine is to improve patients' quality of life, not to foreshorten it'. The arguments
340 for their other key reasons for opposing assisted dying are equally weak.

341 Pain management: failure to acknowledge, recognize and control pain in the patient is
342 unethical, and significantly impairs the quality of life of the patient [30].

343

344 9. **Cognitive dysfunction syndrome** is a recognized syndrome in old cats and dogs, with similar
345 brain pathology to that found in humans with **dementia** and **Alzheimer's disease** [42]. Luckily

346 it rarely reaches the stages found in human medicine as most owners opt for euthanasia at an
347 earlier stage.

348 'Difficulty chewing and swallowing are almost universal and expected complications of
349 progressive dementia. Swallowing problems often lead to aspiration events and pneumonia
350 which usually causes considerable discomfort, clinicians should pay attention to symptom
351 controls. Benzodiazepines or antipsychotics may be necessary to reduce fear and agitation in
352 patients with dementia in the terminal phase. Opioids are the main symptomatic treatment of
353 dyspnea. Changes in a dying patient's breathing pattern might be indicative of considerable
354 neurologic compromise. A study of predictors of survival among 178 Dutch nursing home
355 patients with dementia who had artificial nutrition and hydration withdrawn or withheld
356 showed that 59% of patients died within 1 week. This may be slightly extended if the patient is
357 able to take small amounts of fluids. Continuous pain in the semiconscious patient might be
358 associated with grimacing and facial tension. However, do not confuse pain with the
359 restlessness, agitation, moaning, and groaning that accompany terminal delirium' [43] (pp. 338-
360 339).

361 Increasing restlessness and agitation can occur in the last days of life due to decreasing organ
362 function as many natural human metabolism products and drugs and their metabolites
363 accumulate in the body. The poor hepatic, renal and pulmonary function all contribute to
364 symptoms and patients and families should be warned that restlessness is a reflection of the
365 last steps of a patient on his/her way [44] (p. 31).

366

367 3.3. Ethical Dilemmas

368

369 The value of an animal's life compared to human life is different for people with different moral
370 values, for example vegetarians argue that we have no right to eat animals. Whereas some owners
371 may request euthanasia of a healthy animal which cannot talk and defend its position. This is the
372 most important ethical dilemma facing veterinarians, which they have to deal with, much as
373 doctors have to consider available options at the end of the lives of their patients.

374 Arguments against euthanasia in humans are mainly based on morals and ethics, so it is
375 interesting to review the training that vets receive in ethics and end of life issues, preparing them
376 for their duties in caring for animals at the end of their lives [7].

377 Could it be that the training of medics in ethics needs to be updated due to advancements in
378 medical science? Are they over prescribing opioids and deep sedation during the last weeks of life
379 to cover up suffering? 'A number of intolerable and intractable symptom burdens can occur
380 during the end of life period that may require the use of palliative sedation' [45].

381 In 2012 a study investigated the ethical knowledge and attitudes of a representative sample of
382 192 Bavarian physicians with regard to end-of-life decisions, euthanasia, and the physician-patient
383 relationship. It found that the physicians' knowledge of medical ethics was inadequate [46].

384

385 3.4. Personal Concerns

386

387 As a vet I am concerned for the welfare of animals, near the end of their lives, whose owners are led
388 to believe by the current situation in human medicine in the UK that dying naturally is normal and
389 a certain amount of suffering is acceptable.

390 Physical pain is, I wish I could say 'reputably', but in truth, 'arguably' addressed at the end of life in
391 human medicine but often ignored or not detected in those animals dying 'naturally' at home.

392 'Modern medicine has made protracted death far more likely than before, and I think we
393 vets rightly become accustomed to only seeing and expecting a swift and painless end. A
394 GP friend called me recently to discuss euthanasia of their dying old dog and so I packed
395 my bag to go. However, a few minutes later she called back to say that she and her husband
396 (also a medic), had decided to allow 'things to happen naturally'. And so they did, and it
397 took a couple of days... I was mortified, but then realised that this was what they were used
398 to seeing and they saw nothing wrong' [47] Butterworth, J. (3rd Dec 2016).

399 I, and some other vets [47] are extremely concerned about the welfare standards in humans near the
400 end of their lives. Most of these patients are horribly aware of the degradation of life and terrified of
401 further slow deterioration, eventually leading to the dying process with unpredictable pain and
402 suffering. Is it ethically correct to keep a human alive if they are terminally unable/unwilling to eat
403 and/or drink, repeatedly requesting assistance to die and/or their condition is rapidly progressing
404 towards death with suffering obvious to doctors and carers? Is the over use of sedatives and opiates
405 in these cases inadequate and inhumane?

406

407 4. Recommendations

408

409 The Dutch Government took the bull by the horns in 1990, by requesting the first of a series of
410 comprehensive, nationwide, research articles into euthanasia and other medical decisions
411 concerning the end of life [48]. It is time for the British Government to **urgently** instigate a study of
412 the **need** for PAS, in the **whole** of the UK, for the **terminally ill**, already **on palliative care** and
413 whose life has become **unbearable** to them, including those with **advanced dementia** and **advanced**
414 **neurodegenerative diseases** who have a valid '**advance directive**' which clearly describes the stage
415 at which they would like assistance to die. This study should also include the experiences and views
416 of the public, around the time of the deaths of their close relatives and friends.

417 The results are highly likely to reveal the need for a new Draft Bill about assisted dying to be drawn
418 up for consultation so that an acceptable Bill can be presented to Parliament.

419 5. Conclusions

- 420 • End of life options in human medicine are highly dependent on where in the world you
421 live.
- 422 • Euthanasia of the terminal patient can be a humane option if ending the life of the patient
423 will prevent additional suffering and unnecessary pain and it is their wish.
- 424 • A protracted death, even under palliative care, causes unnecessary physical and emotional
425 suffering for the patient and carers.
- 426 • By including euthanasia in end of life options in veterinary medicine there has been
427 considerable relief of suffering for both the patient and owners.
- 428 • Quality of life and the welfare of all patients, both human and animal, should be a priority
429 and should not be compromised.
- 430 • There are still animals suffering at the end of their lives because of the human precedent of
431 a natural death.

- 432 • Moral and ethical factors are complex in end of life issues in both veterinary and human
 433 medicine. However, due to their training and broad experience veterinarians appear to take
 434 a more holistic approach to end of life issues than doctors, in particular with regard to
 435 assessing quality of life. Those with such knowledge should be encouraged to come
 436 forward to share their expertise in the debate about euthanasia for humans.
- 437 • In some cases the UK public think that they are being treated worse than animals because
 438 UK citizens do not have the option of euthanasia at the end of their lives.
- 439 • The majority of the British public want a change in the Law, approving the option of PAS
 440 for the terminally ill.
- 441 • The Royal College of Nursing have taken a neutral stance in relation to assisted dying for
 442 people who have a terminal illness.
- 443 • It is time for the British Government to instigate a comprehensive study, examining the
 444 urgent need for the option of euthanasia for those terminally ill, already receiving palliative
 445 care and whose quality of life has become unacceptable to them.

446

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