

## Promoting quality of life discussions between the veterinary profession and the pet-owning public

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### Abstract

Because it is the pet-owning public that normally provides the day-to-day care for companion animals, maintaining or improving standards in animal welfare is best achieved by engaging owners in the debate over an individual animal's quality of life (QoL). Veterinary practice teams (including veterinary surgeons and nurses) are in an ideal position to promote discussion of pets' QoL, as most owners respect and value their opinion. As well as educating each new generation of animal carers on appropriate husbandry, the veterinary profession can engage the pet-owning public in the scientific process of QoL assessment and the related debates concerning definitions of welfare and QoL. QoL assessment is a complex process with many influencing factors. The structure of an assessment will depend upon its purpose, which may be research, legislation, a certification scheme or, probably most usefully, a management tool to facilitate clinical decision-making. The process of completing a QoL assessment within a clinical environment may result in positive changes in human behaviour towards animals irrespective of the actual result of the assessment. This influence on human behaviour is a key test of validity for formal assessment systems that are designed to improve QoL.

**Keywords:** animal welfare, assessment, debate, public, quality of life, veterinary profession

### Introduction

Clearly it is the owner/keeper of an animal that has the most important influence on the animal's quality of life (QoL). The veterinary practice team, however, plays a crucial role in advising owners about their animal's QoL, by providing animal-specific guidance and generic information. Veterinary practices are, of course, very familiar with offering animal-specific advice. However, this advice could be developed further by use of formal QoL assessments in order to ensure that all aspects of QoL are discussed. Generic information (such as leaflets, websites and magazines) can also be useful for encouraging debate and educating owners on good husbandry. To date, the veterinary profession has focussed on prevention and management of disease, but QoL can also be influenced by other factors such as social distress and lack of mental stimulation. Formal assessment systems can be useful in encouraging the practice team and owners to consider and discuss all issues important to the animal.

In order to determine the types of discussion that should be promoted in veterinary practice, three issues will be addressed. First, owners must be made aware of the existing knowledge on husbandry and care that is already relatively well defined. Second, QoL assessments that have been developed within the scientific community must be carried out — this way, new scientific knowledge can be communicated and implemented in practice. Third, where uncertainties or gaps in knowledge exist concerning the science or ethics of animal QoL assessment, then these debates need to include the wider public.

### Education: informing owners about existing knowledge

There is much established experience and scientific knowledge defining how we should treat animals. For example, the preferred husbandry conditions for rabbits have been well defined, and yet it is common practice for pet rabbits to be housed in relatively small hutches with no social contact with other rabbits and often minimal contact with humans (Mullan & Main 2006). Communicating this information directly to the animal-owning public is of critical importance. Furthermore, animal carers need to be motivated to improve the husbandry conditions of the animals. Where there is potential for improvements to be made in animal husbandry, then the following steps are (in the author's opinion) necessary:

- (1) Perception: is the owner aware of the problem? Lacking awareness does not imply any lack of empathy; rather, the owner may have become desensitised to less-than-ideal husbandry conditions and assume that the husbandry conditions are normal and, therefore, acceptable for the animal.
- (2) Evaluation: has the owner considered what is causing the problem and what is the best solution? Identifying the best solution may not be easy, as short-term fixes may not be effective in the long-term and may cause other problems. The veterinary team obviously has a role here in ensuring that the optimum solution is identified.
- (3) Action: has the owner taken appropriate action to resolve the situation? Knowing what is best may not necessarily result in doing what is best.

(4) Re-evaluation: is the proposed solution effective? It is important to monitor progress, as circumstances change and other factors may become influential.

An example from farm animal practice is lameness in dairy cattle. Even though a great deal of information exists on the husbandry risks and solutions of lameness (ie steps 2 to 4, above), lameness prevalence in the UK has been observed to be 22% (Whay *et al* 2003). In the same study, farmers were aware of lameness in an average of only 1 in 4 of their lame cattle. Unless farmers are made aware of the levels of lameness and their associated welfare and productivity significance (step 1, above), they are unlikely ever to improve the problem of lameness in their herds.

Education has a role in leading the animal carer through this process. Education resources can vary in style from scientific literature to articles for school children. This information can be presented in a multitude of formats such as leaflets, codes of practice, articles, books, internet and films. Those conveying this information may be based in education (primary, secondary and tertiary), media (radio, television and newspapers) or advisory roles (veterinary surgeons, pet shop staff and animal trainers). The effectiveness of education must be assessed in terms of positive actions by owners and resulting welfare improvements, rather than simply by measures of input activity, such as numbers of leaflets produced or resources allocated.

Veterinary surgeons and nurses have a key role in educating clients on QoL issues. However, studies in Britain and Australia have found that many veterinary students view their education as a rite of passage from 'tender minded' pet owner to 'tough minded' clinician (O'Farrell 1990; Blackshaw & Blackshaw 1993). In particular, students' beliefs about the sentience of animals, and their empathic reactions to animals in distress, appear to diminish during their university education (Paul & Podberscek 2000). Although this process of hardening one's attitudes towards animals may help some students to cope with the emotional and ethical challenges of veterinary work, it may also threaten the welfare of the animals in their care. This increases the importance of animal welfare education to veterinary students, highlighted recently by Hewson (2005). Amongst other education initiatives, a teaching resource designed to facilitate the teaching of animal welfare to students at veterinary institutes has been developed through a collaboration between WSPA and the University of Bristol (de Boo & Knight 2005).

### Science: communicating and implementing new knowledge

In this Symposium, several novel methods for evaluating animals' QoL have been highlighted. At this stage it is important to relate these scientific investigations to potential applications to companion animals. For farm animals, the potential applications for animal-based formal assessments have been identified as research, certification schemes, legislation and management (Main *et al* 2003).

Each of these applications is also applicable to companion animals, as discussed below.

(1) Research: as with farm animals, research can be carried out to evaluate the welfare impact of husbandry systems, such as the individual pet cat kept in a domestic environment *versus* a multi-cat re-homing centre. Another research application would be clinical trials and evidence-based medicine (Holmes & Cockcroft 2004), which normally focus on the particular outcome most closely related to the treatment. However, QoL assessment would be of value where a range of outcomes is possible. For example, a surgical treatment might be successful in terms of lack of secondary complications, but the change in the animal's behaviour resulting from the lack of chronic pain may cause dramatic changes in the social interactions of the animal, which may necessitate additional interventions.

(2) Certification schemes: these are a key part of many livestock industries (Fraser 2006) in many countries. Welfare outcome measures, which are analogous to QoL assessments in companion animals, are being incorporated into some of these schemes. Similar schemes are not widespread for companion animals, although schemes for certification or licensing of boarding, breeding and re-homing establishments could utilise such assessments (CAWC 2004).

(3) Legislation and associated codes: these are becoming more important for companion animals in the UK with the introduction of the Animal Welfare Bill. Although these standards are unlikely to require formal QoL assessments, interpretation of the legal requirement for owners to "ensure needs are provided to animals as required by good practice" should require assessment of individual parameters. For example, the "need to provide a suitable diet" can be assessed by ensuring that animals are not too thin or too fat.

(4) Management: applications for these assessment techniques on farms are well developed within the context of farm health planning. For companion animals the most important difference is the focus on individual animals rather than groups of animals. In particular, QoL assessments can be used to facilitate clinical decision-making, as described later.

For most owners, assessment systems are likely to be relevant only when they apply specifically to their pet; so, for example, the results of such research need only be discussed in cases where they provide information on the likely prognosis of a condition affecting their pet. Similarly, assessments needed to verify compliance with legislation will be relevant only if a problem is identified with their pet. Hence, QoL assessment may be particularly helpful for certain clinical decisions. Veterinary surgeons frequently make informal QoL assessments as part of their clinical care. Some might argue that any formalisation of the process would compromise, rather than improve, the veterinary surgeon-owner relationship. However, the critical benefit of a formal process should be to highlight potential aspects of an animal's life that could be improved. If the purpose of these systems is to improve an animal's QoL,

then the validity of the process in the practice environment should be evaluated by a beneficial change in the management of the animal. For a veterinary practitioner, this test of validity is probably more important than validity assessments concerning either repeatability between and within observers or cross-correlations with other welfare parameters such as more detailed behavioural or physiological measures. If the system generates numerical data that have been extensively validated but the process itself does not benefit the animal, then there seems little point in introducing it into clinical practice.

Formalisation of quality of life assessments may have benefits in the following situations:

(1) Euthanasia decisions: QoL assessment is critical in deciding if an animal has a 'life worth living'. Veterinary practitioners make the decision to recommend euthanasia on a daily basis. Formalising some elements of this decision may be helpful for the owner, vet and animal. However, a rigid, formulaic approach to the process (eg if total score exceeds  $x$  then recommend euthanasia) is unlikely to adequately address the complex issues of the individual animal and its owner. The key benefit of a formal process could be to highlight issues of importance to the animal that had not yet been considered because the consultation had previously focussed only on issues identified by the owner.

(2) Screening tool: a formalised assessment, even for apparently healthy animals, may be useful in identifying issues that might be improved. For example, an owner might bring a dog to the veterinarian for assessment of a minor skin ailment, but a formal QoL assessment might identify other problems such as separation anxiety or gradual weight loss that were not considered important by the owner. An example of a screening tool is the preliminary assessment system described by Mullan and Main (2007) that aims to examine a broad range of issues during a normal veterinary consultation. This assessment examines the resources that are provided for and valued by the animal, physical conditions or behavioural signs that indicate potential problems, and other signs associated with chronic pain.

(3) Monitoring tool: when one or more issues have been identified, a formal assessment that could monitor that issue over time would be useful. An example of a QoL assessment that could be used as a monitoring tool is the questionnaire assessing chronic pain in dogs (Wiseman-Orr *et al* 2004).

Another benefit of formalising this process is that other members of the veterinary practice team, particularly veterinary nurses, could undertake some of the assessments. This would be particularly relevant for use of a QoL assessment as a screening and monitoring tool, where the actual modifications to animal care concerning exercise, diet etc may be equally effectively dealt with by a veterinary nurse.

The particular application for a QoL assessment system has a critical influence on the following:

(1) Scope: as with humans, QoL assessments may focus on a narrow issue (eg certain aspects of health) or may have a wider/global scope. For example, the scope may need to be

wider for an assessment of the value of a husbandry system than it would for an assessment to ensure compliance with a narrow aspect of legislation (eg diet).

(2) Format: assessments that are designed for owners are likely to be very different to those used by researchers. Owners will require short, well-designed assessments that do not require extensive training, whereas researchers' assessments can be relatively extensive.

(3) Reliability: for the results of an assessment to be used within the context of enforcement of legislation, the assessment must be repeatable between different observers. However, this level of consistency may not be so critical when used in a clinical setting.

(4) Integration: aggregation of various QoL domains into a single number or value is fraught with difficulties. Integration requires an assumption of the relative importance that each animal would place on each domain. Furthermore, combining several components can allow compensation of one very poor domain with several good but relatively less important QoL domains. Again, the particular application will define the need for a numerical result. Some might argue that a single number is useful in euthanasia decision-making, although the author would argue that this is unnecessarily prescriptive.

(5) Interpretation: for clinical applications, providing detailed guidance on interpretation of the results from a formal assessment system may be more important than aggregating the result into a single score. For legislation and certification schemes, detailed guidance is needed to define the acceptability or otherwise of the evaluation results.

### Debate: discussing gaps in knowledge

The evaluation of QoL in animals is an emerging discipline. It is clear that there is uncertainty over the use of terms relating to QoL, as discussed in other papers in this issue. Even though consensus may be difficult to achieve, it is important that these debates are not restricted to the veterinary and scientific community but include the wider animal-owning public. As the name of the Symposium suggests, quality of life is the heart of the matter, and many authors believe it centres on the experiences of the animal. At this stage it is important to reflect on the debate over welfare definitions. Whatever pronouncements welfare scientists may make, owners and the wider public have different perceptions. The following debates are crucial:

#### (1) Debate on welfare concepts

Central to the debate on animal welfare, as outlined by (Fraser *et al* 1997), are three common concepts of welfare: naturalness, physical state, and mental state. The range of dog breeds is testimony to the variability in the value placed on each of these concepts by different owners. A standard poodle that is in show condition may be physically and mentally well but it is not natural. Similarly, a British Bulldog bears little resemblance to its 'natural' ancestors and its genetic defects cause considerable physical impairments which are likely to be associated with mental



suffering. Despite this, most owners of these dogs are likely to proclaim that welfare is their prime concern.

### (2) Debate on inclusion of human actions

Another common confounding issue is the inclusion of human actions within the term ‘welfare’. This can be best illustrated by considering, for example, which of the following pet cats has better or worse welfare: (a) the cat whose owners had noticed an infected skin wound two weeks ago but failed to take the cat for veterinary treatment; or (b) the cat which had been missing for two weeks but when it returned home, the owners noticed an infected skin wound and took it for veterinary treatment.

A scientific investigation (eg pain sensitivity, inflammatory response, weight loss) of the animals would not reveal any difference between the two cats. However, the consideration and treatment shown by the humans is worse in the first case, ie there is a difference in the human actions. It may be possible to argue that the owners in the first case, but not the second case, were guilty of causing ‘unnecessary suffering’. Using a welfare definition that focusses only on the state of the animal and not on human actions, the welfare of both animals would be the same; however, many people would intuitively declare that the welfare of the cat that had received minimal care from its owners would be ‘worse’.

### (3) Debate about inclusion of quantity of life

This Symposium has focussed upon the assessment and meaning of *quality* of life, yet there is strong evidence that owners also value very highly *quantity* of life. For example, the press coverage and RSPCA campaigns relating to greyhound racing have focussed on the killing of greyhounds that are no longer needed for racing. The RSPCA campaign states that “Racing greyhounds may face a number of welfare problems during their lives including: ... Being abandoned and killed when they don’t make the grade because they are unsuitable for racing” (RSPCA 2006). Although society may place a value on not shortening an animal’s life, welfare definitions that focus on mental or physical states do not address this moral value directly. It is important to point out that society is inconsistent in its attitudes towards quantity of life, with many owners being desperate to keep their pet alive, yet having no problem consuming meat products derived from slaughtered healthy young animals.

### (4) Debate about the value of positive versus negative welfare

Welfare science and many welfare concepts such as the Five Freedoms (FAWC 1993) have focussed on assessing the negative consequences of human actions on animals. Whilst it is reasonable to argue that avoiding harms should take priority, any welfare or QoL assessment that does not assess the good things in life seems incomplete. Freedom to express normal behaviour could be argued to address this issue, but it is possible for animals to exhibit a full range of normal behaviours and then experience additional pleasures associated with additional stimuli. Excluding an explicit

evaluation of positive welfare would not reflect the value placed intuitively on these issues by day-to-day carers. The assessment of positive welfare is covered elsewhere (Boissy *et al* 2007, pp 37–43, this issue) but in broad terms it can include observation of behaviours, physiology and alteration of cognitive processes. In addition, assessment of resources that appear to be valued (ie wanted) by animals also appears to be relevant. The caveat that obviously needs to be considered regarding these resources that are valued in the short-term is their capacity to cause harm in the longer-term.

### Animal welfare implications

This paper has outlined the animal welfare benefits of promoting discussion between the veterinary profession and the pet-owning public with respect to existing knowledge (education), new knowledge (science) and gaps in knowledge (acknowledgement of these gaps and appropriate debate). As the title of the Symposium suggests, quality of life is at the heart of the matter when considering animal welfare. The new UK Animal Welfare Act and its associated obligation to provide a duty of care will present a perfect opportunity to promote this holistic positive assessment in veterinary practices. However, it is important to point out that QoL assessment neither ensures a minimum standard nor improves the lives of animals without human action. Furthermore, whatever welfare scientists might proclaim, human actions are usually the focus of attention for animal owners and policymakers when they talk about ‘welfare’. It is only through human actions that QoL can be improved for animals.

QoL assessment can be seen as a means to an end. Crucially, differences in the ‘ends’ may affect the format of the ‘means’. So, for an evaluation of laboratory housing systems, a complex system that assesses the different components of welfare and integrates the results into a single score may be the desired goal. For animals with chronic medical conditions, a formal system may be useful for veterinary surgeons and owners to establish the point at which QoL is sufficiently poor to justify euthanasia. In other companion animal settings, an assessment system may help owners to identify opportunities for improvement. As with farm animals, a ‘one size fits all’ approach to QoL assessment may, therefore, not be appropriate. For such assessment tools to be used by the veterinary profession and their clients, a key test of validity is that they actually promote change in an animal’s management leading to a decrease in negative and an increase in positive experiences of the animal. This would suggest that the details of the methodology itself may not be that critical, and that the veterinary profession need not wait for welfare scientists to agree upon the final format of an assessment system before they begin to make their own, more informal, assessments of animals’ QoL.

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