Module 32
The Role of the Veterinarian in Animal Welfare
Lecture Notes

Slide 1:
This lecture was first developed for World Animal Protection by Dr David Main (University of Bristol) in 2003. It was revised by World Animal Protection scientific advisors in 2012 using updates provided by Dr Caroline Hewson.

Slide 2:
Vets have many different roles in animal welfare. Many of those roles are covered in other parts of this course, or in other parts of your degree studies. Today’s lecture will focus primarily on how individual vets, in practice, can influence animal welfare through:

• pain management
• ethical decision-making
• client communication.

We will also look at the collective role of vets in animal welfare, i.e. through their professional bodies.

Slide 3:
Animal welfare science has developed in more industrialised countries where people have the highest standards of living in the world. Serious and widespread infectious diseases in livestock and pets are very uncommon in such countries today. Because of this, it is easy to forget that when infectious disease is prevalent, it is a major cause of animal suffering. It is also easy to underestimate how important the veterinary profession has been, and continues to be, in safeguarding animal welfare by keeping animals healthy.

For example, there are now at least 60 vaccines against major infectious diseases in the main domestic species (e.g. tetanus in horses, Newcastle disease in poultry, clostridial diseases in sheep, rabies in many species, distemper in dogs). These diseases would otherwise cause widespread suffering. Vets continue to research infectious diseases and to advise governments and individual owners about the best use of these vaccines, so that many millions of animals are protected each year.
Because of the rapid expansion in knowledge of health and diseases – infectious and otherwise – in all veterinary species, veterinary medicine has not always kept up with the developments in other fields relevant to animal welfare, especially the field of applied animal behaviour. However, as research has revealed more about how animals can suffer for behavioural reasons, the veterinary profession in different countries is including this consideration more and more.

Vets have always understood a lot about normal animal behaviour as it relates to physical health because that is how you know that an animal has a clinical sign – his or her behaviour has changed, e.g. a calf who is breathing through the mouth, whereas normally they breathe quietly through their nose; a horse who is not bearing his or her weight evenly on all four legs. Vets also use animals’ behaviour to assess how much pain an animal may be feeling, and to determine the appropriate mixture of analgesic drugs.

What is still relatively new for veterinarians is the growing scientific knowledge about behavioural signs that occur because the animal’s handling or housing are not appropriate. Similarly, there is more and more research being carried out on the importance of positive emotions in animals, and how we can facilitate those.

The main professional association for scientists studying animal welfare and applied ethology was started in the 1960s, and one of the co-founders was a vet called Andrew Fraser, who has since written a number of books on animal welfare. Today, many vets are involved in research on animal behaviour and welfare. Also, many vet schools around the world teach the subject and many of the veterinary professional bodies focus on animal welfare.

This background slide shows you how much the veterinary profession already does for animal welfare.

Slide 4:
There are many other ways that vets influence animal welfare as individuals. The first four items on the slide show some of them. They are in brackets because we will not be covering them in today’s lecture; you will learn about them elsewhere in this course, or in other courses.

Today, we will focus on four other aspects of how vets can influence animal welfare.

They are:

- **Pain management**, a topic you will learn more about this when you cover anaesthesia and surgery. However, studies in difference countries have shown that many vets still do not use adequate pain management in farm and companion animal species, and we will briefly review this.

- Most of you will spend a lot of your professional life deciding on the best course of action for an animal or group of animals and communicating your advice to other human beings. So, secondly, we will look closely at how to make ethical decisions in practice, and thirdly at some important aspects of communication.

- Finally, we will look briefly at the collective role of vets in animal welfare, through the veterinary professional bodies which represent the profession as a whole.
Slide 5:

We look first at pain management. Understanding the pain pathway is important because, historically, vets used to assume that anaesthesia was enough to prevent pain from occurring. However, this diagram shows you that pain perception is complex and that you need a combination of drugs in order to minimise pain.

The pain pathway is similar in all veterinary species (Viñuela-Fernández et al., 2007). It has four parts and this diagram shows the drugs that act at each point along it.

The common situations when you will encounter or anticipate pain in an animal are:

- surgery
- injury (e.g. a pressure sore from ill-fitting harness)
- other causes of inflammation, e.g. disease.

In those cases, taking a dog’s front left foot as an example, the four parts of the pain pathway are:

1. **Signal transduction**: local inflammatory substances are released because the tissues are damaged. These inflammatory substances form a chemical SIGNAL that is recognised by the peripheral nerves and generates a nervous impulse. The effect of this can be reduced by drugs in the aspirin class, known as non-steroidal anti-inflammatory drugs or NSAIDs. (NOTE: Many human drugs in this class are toxic to domestic animals, including aspirin and paracetamol.)

2. **Impulse conduction**: the nerve impulse is conducted to the spinal cord. Local anaesthetics (e.g. lidocaine) prevent this.

3. **Transmission and modulation**: in the spinal cord, the signal is modified and transmitted on up to the brain. Several drugs interfere with this, as shown in the diagram; they include opioids (morphine-type drugs).

4. **Pain perception**: the signal is perceived in the brain. General anaesthesia prevents perception, but it does nothing to stop the other three levels of the pathway. However, other drugs such as opioids also act here and they can help to reduce the perception of pain.

This diagram illustrates why, to control pain well, you need to use a combination of drugs that act at different points in the pain pathway. This is called ‘multimodal analgesia’.

Slide 6:

Relatively little research has been carried out to see how vets apply pain relief in practice but, to date, it has indicated that vets in practice often do not provide adequate pain relief to their patients.

One example is from Canada where national randomised surveys were carried out in 1994, 2001 and 2005. Those papers review other research from the UK, New Zealand, Australia, the USA, Finland and France.
The Canadian results indicated that:

a. many vets relied on general anaesthesia (e.g. thiopental and halothane) to provide pain relief to dogs and cats undergoing routine surgeries, and did not use analgesics adequately or at all

b. many vets did not use adequate pain relief when performing routine procedures on farm animals, such as castration (under 20 per cent of vets used analgesia). This was similar to the subsequent finding of a US survey on analgesia for the castration of beef calves, done in 2007 (Coetzee et al., 2010).

Those surveys also showed that, whereas in 1994 Canadian male vets were less likely than female vets to provide analgesia to dogs and cats, by 2001 there was no difference between men and women.

Other factors affecting analgesic use included the vet’s perception of whether a procedure was in fact painful. In dogs and cats, this was affected by age, with older vets being less likely to think a procedure was painful, compared to younger vets. However, the vet’s age or gender did not factors affecting whether or not the vet used analgesia for farm animals.

For farm animals, important factors that made vets less likely to use analgesic drugs included:

- the cost and availability of licensed analgesics. However, local anaesthetic drugs, e.g. lidocaine are usually very inexpensive
- concerns about withdrawal periods from meat and milk.

In order to make sure that multimodal analgesia is more feasible in farm animals, a country needs to grant licensees for the use of longer-acting analgesic drugs in young animals who are not going to be part of the human food supply until they are much older. This might help to make, e.g. NSAIDS, more widely used and would, in turn, allow their cost to come down.

**Slide 7:**

Research therefore indicates that personal factors such as gender and age can affect vets’ clinical decisions and their attitudes to pain in their patients. As veterinary students, your attitudes to animals’ feelings may be affected by where you grew up, your gender, and so on. Also, your attitudes may change as you go through your degree.

Little research has been reported on this. A cross-sectional study of students at two UK vet schools examined students’ beliefs in the capacity of cattle and pigs to feel hunger. The study suggested that the attitude of the faculty to this question affected how the students felt about it. It also suggested that the more senior students were less likely to be concerned about negative emotions in animals than first-year students.

Studies in the USA (Levine et al., 2005; Serpell, 2005) have indicated that students from farming backgrounds showed lower levels of concern about aspects of animal welfare than students from urban backgrounds.
Slide 8:
Overall there has been very little research reported on vets’ attitudes to questions of animal welfare such as pain.

Attitudes are probably different in different countries. A survey of Turkish veterinarians indicated that most supported positive animal welfare practices, but they disagreed with statements regarding ‘ethological needs of farm animals’, ‘stunning of ruminants pre-slaughter’, ‘phasing out of battery cages for poultry’ and ‘not operating on animals for aesthetic purposes’ (Sabuncuoglu & Coban, 2008).

These examples illustrate that, to avoid personal biases in how to treat animals, logical ethical reasoning is important. Using a logical approach can also make it easier to explain your decision (e.g. to use analgesics) to other people.

We will now look at some frameworks to help you make logical and ethical decisions in practice.

Slide 9:
In veterinary practice you are obliged to make decisions that are in animals’ best interests, while taking into account the interests of the owners and you and your veterinary practice. This is not easy to do without logical ethical reasoning. It is not enough to have a general ‘feeling’ about the situation, although that moral intuition may turn out to be accurate. It is important not to simply follow general opinion without considering the animal welfare issues.

Two approaches that you might use are (a) a six-point framework, and (b) four principles that are used in human medical ethics.

Slide 10:
These six steps can help you to make an appropriate decision.

Slide 11:
The first step is to identify all the possible courses of action. If a possible course of action is missed out at this stage, you will not be able to consider its potential merits.

This first step is a factual exercise only: no moral value is placed on any of the courses of action at this stage. You will use moral values later, to decide on the course of action.

The options for a clinical case may include those listed above. For example, when considering a case of whether to euthanise a cow who is eight months pregnant and has just fractured her left tibia at the mid-point, the possible courses of action may include: no action until the calf is born; casting the leg and waiting until the calf is born or until it is safe to do an elective Caesarean or induce calving; immediate surgical repair of the broken leg; immediate euthanasia of the cow.

However, there are many other veterinary situations that do not involve a clinical case, such as formulating a practice policy on how best to treat animals whose owners are on low incomes.
Slide 12:
The animal, owner and vet will all have an interest in the ethical dilemma. The animal is the only one that cannot speak for themselves. The vet’s role is to safeguard the animal’s welfare and to represent the animal’s point of view. However, this may conflict with the vet’s interests. For example, if the animal needs to be hospitalised overnight, the vet may not be able to monitor the animal during the night because he or she is on call, or has family commitments.

The owner also has a duty of care to the animal. However, this may conflict with the owner’s interest. For example, the owner may have no money, or may need to spend the money on something else such as children’s education, or food. In areas where owners live in complete poverty and do not have enough money for their own most basic needs, the people themselves may be suffering so much that they cannot even begin to consider their animals’ feelings.

Another consideration is that joint owners may disagree over their priorities, for themselves and their animal.

Slide 13:
Establishing the interests of affected parties can be difficult but will allow you to understand the motives underlying each party’s arguments. Using our example of the cow with the broken leg:

The owner may be interested in keeping the cow because she is a pedigree, and may be concerned about losing the calf because this is the offspring of a very good, and expensive, bull. On the other hand, the owner may not be interested in keeping the cow or the calf, because surgery and subsequent care would be too expensive, and because calves are worth so little. Or the owner may want to keep the calf only if she is female and therefore a replacement for the cow.

The cow needs surgery in order to best repair her leg. Even if the decision is to keep her alive until nearer to parturition, she needs analgesics. Depending on your ethical view, the cow also has an interest in staying alive.

The calf is largely unaffected by the cow’s broken leg but may be at risk if that injury hinders parturition, such that the calf might die or be brain-damaged because of hypoxia during a long birth, and so not fulfil its potential.

The veterinarian may feel strongly that the owner is wrong to want to keep the cow, without pain relief, just to see what sex the calf is. (Ultrasound might help here, but is not always available.)

The economic issues need to be considered, as they may have a reasonable or unreasonable effect on the decision. Some might argue that a veterinary surgeon’s motivation to generate an income (e.g. by doing a Caesarean section on the cow or even doing orthopaedic surgery) would be an unreasonable motive which should not be included within the ethical decision, whereas the owner’s ability to pay for treatment may be relevant. On the other hand, if the vet
is struggling to keep their practice going because of competition from other vets or a weak economy or an impoverished clientele, he or she cannot afford to carry out surgery or provide extended advice and treatment if the owner cannot pay for it.

**Slide 14:**
This point in the six-point process of making an ethical decision can create tension for vets. This is because vets have to serve owners – by giving them a solution that they will implement on behalf of their animal – but vets’ first obligation is to serve the welfare of the animal by recommending the best solution for him/her.

An owner may not always agree with what you think is best for the animal, and this is often because there is no universal consensus about the moral status or the value of animal life. For example, a hen is a sentient animal, but to a farmer with small profit margins and thousands of hens, a sick hen is ‘just a hen’ and has little value.

**Slide 15:**
Once you understand the sources of the ethical tension, it is important to be clear about your responsibilities as a vet: you cannot blindly follow a client’s wishes, because you have wider obligations to maintain public trust in the profession as expert guardians of animals’ welfare.

**Slide 16:**
You may also need to discuss clients’ responsibilities with them, and to explain that the veterinary practice cannot take over their responsibilities towards their animal. This may be a difficult conversation to have, and it requires good communication skills.

Once you have clarified your role and the client’s role, you can then continue to explore options for the animal.

**Slide 17:**
Moving on to stage 3 of the ethical decision-making process, having established the treatment options, and the interests of all the parties – and clarified your responsibilities as the vet, and the owner’s responsibilities – the next stage is to identify the ethical issues involved and decide which one is most important.

Some of the ethical issues in our example include: should a vet always do what a client wants? We have seen that vets should not always do so. Is the length of life of an animal important? Is the life of an unborn animal important? Does it matter if the cow is in pain? Is the farmer’s need to make a living important?

Sometimes it can be difficult to decide which is the single most important issue. In the case of the cow, how to resolve her pain is the most important issue in the short term.
Slide 18:
It is assumed that vets will act both lawfully and within the boundaries of their professional policy, if one exists. Sometimes professional guidelines help to establish the policy for the profession. However, that policy may not support the ‘right’ action after ethical consideration. For example, a policy may stress a vet’s obligation to client confidentiality. Under this policy, if a vet suspects a client of animal cruelty or failing to meet their duty of care (which may be a criminal offence in many countries) he or she may not be allowed to report the client to the police because that would breach client confidentiality.

Going back to the cow, the professional policy may be that the vet must never leave an animal in severe pain without alleviating it. So, if the farmer needed time to think about the treatment options and neither s/he nor you had much money, it would be a breach of the professional policy if you left without advising the farmer about supportive care and giving the cow treatment (e.g. a hoist to take weight off the cow’s leg, or very deep bedding; multimodal analgesia) and without setting a deadline for when the farmer should make a decision. The maximum deadline would be ~12 hours.

Note that a professional policy on pain is not a requirement: having learned about the pain pathway today, you can see that it would be inhumane and unethical to leave the cow without attempting to manage her pain.

Slide 19:
To review: you have identified the options of treatment for the animal, established the interests of all parties, identified the ethical issues with each option, and established what the law requires. The fifth stage in your decision-making process is to use a logical ethical theory in order to choose a particular course of action.

Different ethical theories may be appropriate for different situations (see Module 4 for an explanation of ethical theories) and, if you know which one you are using, the reasons for your choice of action will be clear. This is useful for your own peace of mind, and if the owner or any authority later questions whether you had made a good decision or accuses you of negligence.

Using our example of the pregnant cow with the broken leg, a deontological rule may initially be followed that rules out severe or lasting pain and distress for the animal. In this case, not treating the cow would cause lasting pain and distress to her, so some action must be taken. However, the inherent value of the calf’s life must also be considered, along with the risk that premature birth might pose to it.
A utilitarian analysis weighing up the costs and benefits to all parties for each option gives the following:

**No action**
- Advantages: farmer saves money on surgery
- Disadvantages: cow suffers; calf may die during parturition if cow’s injury interferes with labour; cow may not eat enough and may suffer metabolic disease once milk production starts after parturition; veterinary surgeon is not relieving suffering.

**Immediate euthanasia**
- Advantages: cow no longer suffers; veterinarian fulfils duty to prevent suffering
- Disadvantages: lose the calf and the cow

There has been little research into how veterinarians apply ethical theory. A Canadian study suggested that vets typically used a combination of utilitarianism and deontology (Schneider, 2001).

**Slide 20:**
To recap: logical ethical reasoning is very important so as to avoid having biased attitudes to the welfare of animals under your care. That bias can range from being indifferent to the animal’s feelings, to being too concerned about the least negative emotion.

**Slide 21:**
Once you have decided on your course of action logically, using ethical theory, there may be ways to reduce any harm caused by that situation. This might include using a better analgesic regime, or providing follow-up for the farmer to address any doubts or second thoughts that he or she may have after consenting to let you take the recommended action. Essentially, you are refining the welfare impact of the decision on all parties.

This refinement concept is part of the ‘3Rs’ (replacement, reduction and refinement) that are normally applied to laboratory animals. (See Module 19 for a further explanation of the 3Rs.) In our example, if the surgical option is chosen, then steps should be taken to minimise pain and distress for the animal (such as good analgesia and nursing; deep, comfortable bedding; the use of a hoist to support the cow when upright), and the time and financial implications for the owner (such as payment by instalments) should be considered.

Ideally you will have gone through the entire decision-making process in consultation with the owner. At this point, however, now that you have given the owner full information and reasons for your recommendation, they have to decide whether or not to follow your advice. It is important to have clear boundaries for yourself at this stage, as the next slide shows.
Slide 22:
Setting boundaries for clients means that you must respect their right to make their own decision. You should not use guilt to try and persuade a client to follow the course of action that you recommend.

You also need to have clear ethical policies of your own as a veterinarian or a veterinary practice. This may be, e.g. that you will not fire horses, dock puppies’ tails, dispense drugs without seeing an animal first, etc.

If an owner does not want to follow your advice, this can create pressure on you in regard to your concern for the animal’s well-being. One option for you is to offer the owner a second opinion, with another vet in your practice, or at another practice. If that is not possible, it is important that you try to provide palliative treatment for the animal, e.g. pain relief.

Occasionally, you may feel that the owner is failing completely in terms of duty of care towards the animal and you may consider reporting him or her to the appropriate authority, if the law in your country provides one. However, this is not a decision to undertake lightly, and you should talk to colleagues and to your licensing body and insurer first.

Slide 23:
This slide reviews the six-step framework. Next we will look at the ethical principles that are used in human medicine.

Slide 24:
These four principles will be discussed in the following slides.

Slide 25:
The principle of not doing anything harmful should be followed where possible. This principle was first expressed in human medicine, in Latin: Primum non nocere – “Above all, do no harm”. It is also used in veterinary medicine.

Often in medical or veterinary situations some harm will occur, but this may be balanced by a long-term or overall benefit. For example, the surgical removal of a tumour will cause harm in the short term due to potential pain and risks of surgery but, in the long term, the animal benefits because it has a longer, more pain-free life.

Slide 26:
Once the degree of harm is minimised, then the promotion of good should follow. For example, once a diagnosis is reached then treatment should be started as soon as possible.
Slide 27:
Autonomy is considered very important in medical ethics. It applies slightly differently to animals because they are often unable to be completely self-governing. For instance, they are rarely able to make choices about the treatment they receive. More generally, any two autonomous beings may have conflicting interests which need to be balanced: for example, the interest of a songbird in staying alive versus the interest of a domestic cat in performing natural behaviour by going outside and hunting for birds.

The actions that two autonomous beings take to meet their respective needs may conflict. In that case, each one's ability to act may have to be restricted. For example, prey species stay alive by escaping from prey, while predators stay alive by chasing and killing prey. In the case of cats who hunt songbirds, some owners keep their cats indoors so as to protect the birds, but confining cats in this way may cause many cats a lot of frustration. The frustration may be reduced or eliminated with environmental enrichment (see Module 15). Alternatively, if cats do go outside, they could be equipped with a quick-release collar and two bells around their neck, so birds get an early warning of their approach.

Allowing an animal to make choices is related to the freedom to express normal behaviour and may relate to Freedom from disease as well. For example: where cows are left in fields with rich biodiversity, sick cows may be able to choose to eat certain herbs or plants that are beneficial to their health.

Slide 28:
Justice concerns giving equal consideration to animals and people. This is not the same as holding animals and people to be equal.

There are three ways that justice can be achieved in practice. The method used may be decided on general principles or on a case-by-case basis.

1. First, any given resource could be divided up exactly equally. For example, a rescue shelter could give worming tablets to all dogs even if there were not enough to give a correct dose to each animal.

2. If the worming tablets were in short supply they could be given just to certain animals, such as those who appeared to be parasitised.

3. If the tablets were to be given to those animals who would show the greatest benefit from them, animals who were likely to be re-homed might be chosen, in order to prevent human infestation. Alternatively, animals unlikely to be re-homed might receive the treatment, because those who were re-homed could be given worming treatment by their new owners.

We will now look at some situations in veterinary practice that may create ethical problems, starting with surgery.
Slide 29:
These slides have explained the theory of how vets should treat animals. However, ethical decision-making is not formulaic and each dilemma will have unique elements. The next slides look at four common types of situation that you may encounter in practice.

Slide 30:
A common ethical challenge in practice is when an animal’s owner does not have much money, or any money to pay the vet.

Practices and the professional body may have individual policies on this issue. For example, one policy may be that emergency treatment will be given regardless of ability to pay and subsequent treatment could be paid for in instalments. In contrast, if all low-income owners were allowed free treatment and the vet went out of business, this would not promote the greatest good in the long term because the veterinary practice could not survive and then there would no longer be a vet in the community.

Veterinary medicine is becoming more sophisticated, especially for companion animals, with more and more treatments and complex diagnostic procedures being reported. It is important that practising vets understand evidence-based medicine and know whether there is good evidence for the latest treatments or diagnostic procedures so that they are not recommending that owners spend money on treatments that may not benefit the animal much, in terms of longevity and quality of life.

Slide 31:
Large populations of stray animals are a concern for animal welfare and public health in most of the world. The topic is covered in detail in two other lectures in this series. This slide outlines some of the ethical considerations that vets may face.

Some of the points follow a deontological reasoning, e.g. consideration of a right to life or a humane death. Others are more concerned with a utilitarian balancing of the harms and benefits of the situation, e.g. the benefits of humane killing may be greater when animals are causing a public nuisance or when the animals themselves are unhealthy.

It is important that all the benefits are not given to one set of individuals (such as humans), with all the costs being borne by another set of individuals (in this case, the stray animals), and vice versa.
Slide 32:
The picture shows a lame broiler chicken. Lameness is a common problem among broilers. Where farms are owned by large corporations, the company may also have shareholders and be obliged to give them a return. The annual budget is set by managers with no knowledge of farming, therefore farm employees – and the company's vet – may be under pressure to stay within budget so that each animal provides the projected economic return. Consequently, the farm manager may refuse to allow the vet to treat or euthanise an animal at the appropriate time, e.g. might tolerate a large number of lame chickens so long as there is no penalty on the carcass at slaughter.

An additional factor that affects farmers’ willingness to seek veterinary help is that they have very small profit margins. This is often the result of national ‘cheap food’ policies (Hewson, 2007). Vets cannot be expected to solve the ultimate problem of food policy, but it is important to be aware of this wider context in which farming is conducted.

Slide 33:
In many countries, animals such as donkeys, mules, horses, camels and oxen are essential in agriculture work and transport. Their owners may be very poor, to the point where it is hard for them to consider their animal’s feelings because their own (human) lives are so harsh. In other cases, there is simply a lack of education.

Groups such as the Society for the Protection of Animals Abroad (SPANA), the World Association for Transport Animal Welfare and Studies (TAWS), World Animal Protection, and the Brooke Hospital for Animals provide research and education to help improve the welfare of draught animals, while improving the owners’ welfare too.

Slide 34:
We have looked in some detail at ethical decision-making, and at some examples of ethical challenges in practice. Note that there is a book about animal welfare in veterinary practice (Yeates, Animal welfare in veterinary practice) that is due for publication at the end of 2012.

Next we will look briefly at how you communicate with your clients because this will affect the welfare of the animals concerned. Even when there is no ethical dilemma, if you do not communicate your advice effectively, the people concerned will not follow it.

Slide 35:
Traditionally, during a professional consultation, vets (like doctors) have tended to do most of the talking. That is, the vet asks the animal’s owner a lot of questions about the animal, and then advises the owner what to do. However, with both companion and farm animals, often vets find that the owners do not do everything that the vet has recommended, i.e. the owner is ‘non-compliant’. The result of non-compliance is that the animal does not get all the treatment or preventative care that the vet recommended. So despite the vet having knowledge and passing it on to the owner, the animal does not benefit.
In some countries, researchers are beginning to study this, and it is becoming clear that compliance rate is higher if vets talk to their clients and take time to understand their perspective on the problem. Then, the owner is more likely to feel part of the solution for the animal, and the vet can make sure that his or her advice is tailored to the individual client.

**Slide 36:**

One example of this research concerns dairy farmers’ compliance with their vets’ advice about mastitis and herd health. In many countries, the national prevalence of sub-clinical mastitis has not changed much, even though scientific research indicates what the risk factors are and has shown ways to reduce the risk.

Most vets agree that even though farmers know many of these risk factors and the problem that mastitis causes for their animals and for themselves, and even though the vets advise them on how to reduce the problem, many farmers do not take sustained action, and so the problem remains.

In a review carried out in the Netherlands, the authors pointed out that this is because farmers have a range of internal motivations for opposing or agreeing with what their vets may tell them. It is only by talking to each farmer in an open conversation that you can really understand their mindset and, therefore, how you can best convey information so that he or she implements it and so improves the welfare of the cows (Lam et al., 2011). More research on this is needed; it is not clear if the findings apply in other cultures or farming situations. However, it indicates how important communication can be in improving animal welfare.

This slide is based on the review from the Netherlands and shows some of the factors that may affect how willing a farmer may be to take your advice and make changes.

**Slide 37:**

Another review, by Danish authors (Kristensen & Jakobsen, 2011), points out that farmers do not simply make decisions using logic, i.e. simply by thinking rationally about different courses of action and their consequences. There are other factors operating as well, e.g. their job satisfaction; preventing economic losses; external financial incentives such as penalties for not acting, or premiums if they do act, etc.

In a Danish study of 18 vets and 16 dairy farmers, it emerged that vets thought farmers were most concerned about the economic benefits of having a dairy health plan, whereas the farmers were more concerned about how that plan would fit in with their other goals for the farm and their everyday life (Kristensen & Enevoldsen, 2008).

Another example of how different stakeholders may rank money highly but others may not comes from a survey of smallholder llama farmers in Bolivia. There, the women appreciated having the animals for their dung rather than because of their economic value, because the dung is needed for fires for cooking. In contrast, the men put a higher value on the animals’ monetary value, either to generate cash routinely or in case of needing to generate cash urgently (Markeman et al., 2009).
Slide 38:
This slide reviews what we have talked about so far: how vets already make a big contribution to animal welfare, and two important elements that affect the ability of individual vets to influence animal welfare in their day-to-day work – ethical decision-making and communication. You cannot master those two skills in this short time—they both take practice and experience, but you now have background knowledge that will help you with each aspect.

Finally, we will look at how vets influence animal welfare collectively, through their professional bodies.

Slide 39:
In many countries, the veterinary profession (like doctors and others) has two types of professional body.

1. The licensing body, which protects the public interest by ensuring that only qualified people can treat animals. This body enforces the country’s law in that regard and, in many countries, can prosecute someone who is operating a veterinary service but is not a vet.

2. One or more professional associations. Some professional associations are a way for vets to share knowledge about a clinical speciality (e.g. for bovine medicine, anaesthesiology, etc.). However, usually there is also one which is a self-interest body that protects the profession’s interests (e.g. in making a good living, being recognised as leaders by the public, being allowed to sell drugs, etc.).

Slide 40:
Whether the licensing body is independent of the professional association or not, it supports animal welfare by enforcing the region’s law regarding the practice of veterinary medicine. This includes making sure that vets follow certain rules or policies.

For example, there may be a professional rule indicating that members must seek client consent to perform post-mortems on their animals. So, even though it might be helpful for the welfare of other animals if you did a post-mortem on the dead animal in your clinic, your professional body may forbid you to go ahead unless you have obtained permission from the owner first.

It is important to have an effective disciplinary structure in order to enforce policies. The sanctions will be from within the profession and may range from a warning to not being allowed to practise. Criminal matters should be handled by the police, but such issues may also be dealt with by the profession if appropriate.

In the example of the post-mortem, if you proceed without the owner’s consent, the owner would have a legitimate complaint against you. If the owner took the matter to your professional body, you might be disciplined for breaking the rule even though you had done it with the intention of serving the greater good.
Professional policies will usually reflect the views of a majority of the profession, but may sometimes be imposed by government (e.g. vets may be obliged to provide owners with prescriptions for drugs, so that the owner can buy the drugs at a chemist and get a better price, if the owner wishes).

The policies may be expanded into useful guidance for vets in difficult ethical situations, e.g. dealing with low-income clients.

**Slide 41:**
Besides making sure that vets safeguard their patients’ welfare, the licensing body may also help animal welfare in other ways, as follows:

1. **Advising government on related legislation.** For example, rigorous, expert, independent advice to government on matters relating to veterinary care (e.g. on the development of new vet schools; prescription of drugs). Comments on proposed legislation (e.g. animal protection legislation). Suggests future legislation.

2. **Developing policy** concerning what is an act of veterinary surgery/medicine. For example, in the UK, it is illegal for non-veterinarians to dock dog’s tails because that is an act of veterinary surgery. In turn, in the UK veterinarians are forbidden by the licensing body to dock dogs’ tails for cosmetic reasons – or to declaw cats.

3. Making **public comments** on animal welfare.

**Slide 42:**
In order to get your veterinary licence in some countries, the registration procedure includes taking a veterinary oath which may include a commitment to animal welfare. Sometimes, an oath may be a requirement to join a professional association, but not a requirement of getting your licence.

The oath may also include parts about advancing knowledge, promoting public health, and so on. Parts of the oath may contradict each other. For example, an oath which includes a commitment to advancing veterinary knowledge might need clarification to imply that this must be at the expense of animal welfare. Where a contradiction occurs with respect to two aspects of the oath for a given situation, guidance should be available as to which must take priority.

The oath may also serve to remind vets of their duties to the profession as a whole. The oath usually includes a section promising not to bring the profession into disrepute. If vets do not safeguard animal welfare (e.g. if they do surgery without anaesthesia or analgesia), this brings the profession into disrepute.
Slide 43:
In many countries, the licensing body usually has oversight of the curriculum at veterinary schools, and inspects schools every five to seven years to check that standards are being maintained. If a school does not meet the necessary standard of training in some or all areas, including animal welfare, it might fail the inspection. In that case, its graduates might not be recognised by the licensing body.

In the past, veterinary curricula have focused on the physical functioning (animal health and production) and part of the mental state/feelings (pain) aspect of welfare, but not on the element of important species-typical behaviours. This means many curricula have not trained vets in the full scope of animal welfare or taught it as a subject in its own right. However, this is changing.

For example, the World Organisation for Animal Health (OIE) specifies knowledge of animal welfare – recognising suffering and knowing where to find out about particular situations – as one of the essential skills that all newly qualified vets should have (OIE, 2011).

Slide 44:
In many countries, the veterinary profession does not have a clear idea of its collective responsibility to animals. Is there a responsibility for the licensing body to show public leadership in questions of animal use? To promote welfare?

For some veterinarians, being a vet is mainly a way to earn a living, and to work with animals and people. However, this exclusive privilege brings with it a duty to serve. What that service consists of today has not been debated: students and individual vets may prefer not to have to think about it because it is such a vast and perhaps daunting area. Many students will follow the example of their teachers and seniors: if students are encouraged to become professionals who educate the public, they are more likely to do so.

Also, in countries where the economy is very weak, being a vet does not guarantee a living wage. In those circumstances, the professional and licensing bodies may not feel in a strong position to also take on the role of showing public leadership in questions of animal care and use. Moreover, it is not reasonable to expect members to think about their role as public servants when they may be struggling to make a living.
We have looked at how the veterinary licensing body can influence animal welfare. We will now look at how the professional association can also influence animal welfare.

To recap: the licensing body may be said to protect the public and animals from vets by setting and enforcing the standards of the profession. In contrast, the professional body represents vets’ own interests.

When the licensing body and the self-interest body are one professional association, they may choose not to comment on questions of animal welfare (e.g. docking puppies’ tails for cosmetic reasons). This is because, while they wish to support the public interest in having animals treated well, they are also representing vets who earn a living from carrying out these procedures. This is a conflict of interest for the association. (Hewson, 2003, 2004a, 2004b, 2006). However, public leadership does not have to be confrontational or critical of owners as a whole; the criticisms can be constructive. Also, if animal welfare is always the first concern, it is likely that vets' interests, animals' interests and the public interest can all be served well (Main, 2006).

The interests expressed by the veterinary professional body depend on the values held by the executive of the professional body and on how active members are in making their own views known. As a result, the interests expressed publicly may be short-term or long-term, and they may or may not coincide with animals' interests. For example:

- The UK government ruled that vets should not have a monopoly on the sale of prescribed vet drugs because it kept prices artificially high, which was unfair to owners. As a result, UK pharmacies can now sell veterinary drugs. This gives owners a choice of where to buy their animals’ drugs, and the drugs are cheaper. However, vets have lost drug revenues and some must therefore charge more for their time. As a result, some farmers may not be able to afford to call the vet out, so sick animals suffer. The British Veterinary Association argued strongly against the government’s ruling, but did not prevail. This is an example of where vets' interests and animals' interests coincided, but clashed with farmers’ (very real) interests.

- The American Veterinary Medical Association (AVMA) supported the forced moulting of laying hens for many years, despite strong protests by its members. This was because the AVMA leadership did not want to alienate the large corporate poultry farms. The AVMA only came out in complete opposition to forced moulting in 2004; this came directly after a campaign by animal rights groups which included a full-page advertisement in *The New York Times* shortly before the AVMA’s annual general meeting in 2004 at which the association as a whole finally opposed forced moulting (Hewson, 2004a). This is an example of vets’ interests clashing with animals' interests.
Slide 46:
Because professional associations protect vets' interests, any positions they take on animal welfare may be vague or equivocal because of fear of alienating veterinary clients or the farming or pet food or pharmaceutical industries.

When a professional body has a position on a question of animal welfare, it is not legally binding on members – it is not the same as the policies enforced by the licensing body.

Slide 47:
In this lecture we have looked at some of the ways that vets influence animal welfare as individuals, through:

- pain management
- ethical decision-making, and
- communication with clients.

We have also seen that the veterinary professional bodies can have a strong indirect influence on animal welfare through the standards that they enforce on the profession, through the standards they set for veterinary schools, and through their position statements and public leadership on questions of animal welfare.