# Module 34

# Veterinarians as Animal Welfare Educators



## Lecture Notes

#### Slide 1:

This lecture was revised by World Animal Protection technical advisors in 2012.

#### Slide 2:

In your work as a veterinarian you will be helping many groups to learn about, understand and have concern for animals and animal welfare: pet owning clients (children and adults), other professionals in industry (animal technicians, farmers, stockpersons, veterinarians – in training or practice), policy makers and legislators (governments), and non-governmental organisations.

Therefore Animal Welfare Education (AWE) is central to the work and role of the veterinarian and you need to understand your role as an animal welfare educator and how you can fulfil it both as a veterinary student and as a veterinary professional in the future.

In its broadest sense, AWE is designed to increase people's awareness, knowledge and consideration of animal welfare, with the underlying assumption that this will help to facilitate people to better and more appropriate care towards companion, farm, laboratory, captive exotic and wild animals.

At the end of this lecture you will:

- understand that a field of formal AWE exists both inside and outside of veterinary medicine
- understand that a research discipline concerning the evidence base for AWE is emerging
- recognise and understand the central role animal welfare should hold within your own learning environment
- recognise your role as a veterinary animal welfare educator by engaging with and helping key individuals (e.g. fellow vet students, your clients) and organisational bodies (e.g. governments) to fulfil their duty towards ensuring good welfare for animals.

#### Slide 3:

When you graduate you may be required to swear allegiance to a professional oath or declaration in order to gain license to practice as a vet. On this slide we can see the process involves making a verbal commitment to animal welfare in three different countries (Brazil, the US and UK).

As a professional vet your work can have a direct impact on animals and their welfare. Although the primary focus of veterinary work may often take the form of direct treatment of animals, veterinarians with robust and well-rounded knowledge and understanding of animal welfare science, ethics and law are in a unique position to both engage in and provide sound and effective AWE. In order to safeguard animal welfare, vets must ensure they have a sound understanding of the subject matter and so can increase awareness of animal welfare amongst others who own or work with animals so that these animals can be provided with the best possible standards of management and care.

We will now look at the different contexts in which AWE will affect you as students and as qualified professionals.

#### Slide 4:

AWE takes place as a matter of course and necessity in a variety of contexts within veterinary work. Once you have qualified, you will be required to actively engage in animal welfare education activities on a daily basis in the following contexts.

- In practice: when working with companion animals you will need owners to understand how to meet the animal's behavioural and physiological needs and why this is important. You may also have to act as a decision-making support for owners weighing up which treatment to give a sick animal, factoring in the animal's likely quality of life according to the different options. This will include considering when may be the right time for euthanasia. In the context of working animals, you may provide emergency, general and preventative treatment for various ailments and illnesses. Along the way you will be helping owners to understand the importance of implementing high welfare standards for their animals, as well as equipping them with the necessary key skills to maintain them, in order for the owner to be able to continue to use their working animals to earn an income.
- On farms /in industry: When working as a large animal veterinarian: you will be spending your time treating animals on-farm, helping farmers to manage various health and welfare issues. As part of a food quality or assurance initiative or scheme you may become involved in assessing the welfare of food animals on the farm or in transit to and through markets and/or slaughter plants. You may work as a welfare advisor, helping and supporting farmers to improve welfare through one-on-one visits, workshops and events, publications and even online support networks. In industry you may also work with companion animals in boarding kennels and rescue centres and laboratory animals in university research centres and privately funded research companies (e.g. pharmaceutical companies, pet food manufacturers).

- As a veterinary educator: When in or delivering veterinary education: in some countries, graduating vets make a verbal commitment to safeguarding animal welfare and the need for animal welfare science, ethics and law to be included in veterinary curriculum is becoming increasingly recognised worldwide. All veterinarians that work as part of a veterinary school are in a key position to share their knowledge and understanding of animal welfare with the next generation of vets. In some veterinary schools there may be lectureships in animal welfare science and/or ethics. Additionally institutions that administrate and offer other forms of education that involve or concern animals may also draw upon the expertise of veterinarians to help ensure that students of, for example, biology or medical science have an adequate understanding and appreciation of animal welfare. It is important to remember that, as part of your training as vet students, you may work in clinics, animal hospitals or in industry alongside other vet students and qualified vets. These qualified vets therefore also acting as animal welfare educators in the context of the clinic.
- When working with animals used for sport or entertainment: you may work to deliver AWE
  to people who work at, for example, horse breeding and racing stables, cow and horse
  rodeo events or aquariums.
- As a Policy maker: as a qualified veterinarian you can also play an intrinsic role in policy making within a variety of industries and professional bodies in different countries (e.g. animal charities, national and international animal non-governmental organisations, public health and food security and safety agencies, governments). Through this process you share your understanding, knowledge and appreciation of animal welfare with various non-veterinarians who may have a limited background in the field. For example, in the UK, the Farm Animal Welfare Committee (www.defra.gov.uk/fawc/), individual veterinarians and other specialists provide expert animal welfare advice to UK governmental bodies.
- Veterinary work for an animal welfare organisation: Module 33 further explores the ways in which vets may work with animal welfare organisations, including as part of humane education projects, informing communities, through working with animals owners directly and as policy advisors.

We will now take a more structured look at the different approaches that can be adopted in delivering AWE.

## Slide 5:

There are four main approaches within AWE aimed at children and/or adults:

1. Formal AWE in schools and colleges which is intended to develop caring attitudes for future generations of citizens. This often falls under the umbrella of Humane Education (HE) which includes Environmental Education and other similar topics, all of which are closely interwoven. Animal welfare topics can be integrated into existing subjects within the school curriculum, e.g. science, literacy, citizenship and drama; and within tertiary curricula for vet, animal husbandry, biology students etc. As a vet student or as a qualified vet, you may become involved in teaching a HE programme or animal welfare at university level.

- 2. Formal training for different groups who work with animals, e.g. slaughter personnel.
- 3. Informal education, e.g. through talks and publications for youth associations, farmers' groups, pet owners, consumers etc.
- 4. Public awareness campaigns, e.g. against the wearing of fur etc., have contributed to changes in public attitudes to animal welfare issues, although the success of these need to be measured in the long term to ensure they are sustained.

Finally, how you act towards animals and the environment and the advice you give to clients are all forms of AWE. So too is the way you handle animals.

We will now explore work relating to HE as a form of AWE in more detail.

#### Slide 6:

Humane Education (HE) involves teaching compassion and respect in relation to animal welfare, environmental and social justice issues.

Formal HE is mainly aimed at young people because, as children develop, they are in the crucial stages of forming their ideas and attitudes. The goal is to help children to develop the capacity for empathy, which is the ability to understand and share the feelings of others, and respect for all life forms. The theory behind AWE is that giving children positive instruction about animals and all life will help to create a society of caring individuals in adulthood. This theory is linked to the evidence that exposing children to violence towards animals or other humans correlates with violent behaviour in later life (this is discussed further on the next slide).

Similar instruction can have value in older students and adults as well. For example, educating stockpeople on farms and at abattoirs in animal welfare can bring about changes in their ways of working that in turn reduce stress in farm animals and increase productivity and meat quality (Hemsworth, 2003; Grandin, 2010). More generally, many university departments, from Law to Film to Conservation Biology, offer studies in aspects of animals in society (DeMello, 2010) which are also a form of HE.

A more difficult problem is educating the public to have more humane attitudes to animals that they may not have direct contact with and towards the environment more generally, e.g. helping the public make more informed purchasing decisions and to consider whether their purchases may have been produced in a way that results in poor animal welfare or that has adverse effects on wildlife in the country of origin.

Now we will consider some further research examining the extent to which HE may influence human attitudes and behaviour towards animals.

#### Slide 7:

There is much we still need to learn about how to instil positive attitudes towards animals in children. Research indicates that there is an association with a reduction of children's fear of pets, an increase in knowledge of the animal world, an improvement in perception of animals, and a greater sense of responsibility towards animals, especially owned ones. Children who did not have a pet showed a proportionally higher improvement (Mariti et al., 2012). At present we can say that AWE with children is a worthwhile effort.

Education changes human attitudes and behaviours in positive ways for animals as indicated by work with specific groups of adults such as stockpeople and abattoir workers.

An important point is that some children may feel powerless to effect change in welfare generally, especially if they know how many animals are involved. Researchers in the UK stressed the importance of not only emphasising how many species can suffer, but also empowering children to act through effective AWE.

Next we will examine the assumptions, limitations and barriers to AWE.

#### Slide 8:

The assumption of AWE is that it increases empathy, resulting in humane attitudes that will, in turn, translate into humane behaviours (e.g. ensuring animals are not distressed and experience positive emotions; living in ways that encompass care for the environment and the people and animals in it). However, it is not clear whether empathy and compassion can be effectively taught. It is also important to be aware that the link between attitudes and behaviour is not linear as many factors affect behaviour, and this must be taken into consideration when an education programme is delivered.

It is very difficult to assess the impact of AWE given to children on their lives and decisions as they grow into mature adults. There are numerous factors that could reverse positive attitudes. Increased knowledge of animals is not enough: what matters ultimately are the behaviours that result over a person's lifetime. However, there has been no reported research on lifetime studies of the impact of AWE or HE more generally. Typically studies report no follow up, or follow up after one year (Ascione, 1993).

In the next few slides we will consider how HE may influence human-animal interactions and how this is relevant to the work of vets.

#### Slide 9:

In your work as a veterinarian you may encounter and treat animal patients that you suspect may be the victims of physical or emotional abuse by a human perpetrator, possibly the animal's owner. You will need to learn and understand how to recognise animal abuse and neglect, what to do about this type of animal welfare issue (for the animal) as well as what to do about it in relation to the perpetrator, who could potentially go on to be violent towards humans. For reference, Module 30 looks at animal abuse in more detail. Here we will focus on exploring the theory of why perpetrators of animal abuse may potentially commit domestic violence, and the positive role AWE may play in addressing this issue.

There is a considerable amount of research in western societies linking the abuse of animals with the abuse of children, i.e. intentional injury to animals and intentional injury to children. The correlation between these two has been striking and the phenomenon is often termed 'the link'. A book by Frank Ascione (2008) summarises the research into the many issues involved.

In households where there is animal abuse there is a likelihood that child abuse will also be found and vice versa (this is also briefly discussed in Module 30). Available data indicates that children who experience abuse in the home, or witness conflict in the home, are more likely to abuse animals than children who do not have such a negative home environment. Additionally some children who are cruel to animals may be more likely to become violent towards humans. As adults, they may go on to abuse any children they have of their own. This next generation may then also enter into the same cycle of violence. Animal abuse and human violence do appear to be linked in a recurring cycle from one generation to the next. There is a growing body of research in the area of 'the link', and while there are no lifetime studies that prove these connections, the correlation is striking. We will briefly review two examples here:

- Kellert and Felthous (1985; 1987) examined data obtained by personal interviews with criminals and non-criminals in the US. The researchers found that childhood cruelty towards animals occurred to a significantly greater degree amongst aggressive criminals than amongst non-aggressive criminals or non-criminals. Family violence was significantly more common amongst aggressive criminals with a history of childhood cruelty towards animals.
- A much more recent study in Australia interviewed 241 adolescents (aged 12-16 years). The results indicated that witnessing animal abuse was a predictor for (i) bullying other children and (ii) performing animal abuse (Gullone & Robertson, 2008).

Overall, we can say that, research completed in western countries indicates that animal abuse appears to be one of several predictors of violence towards humans. More research concerning the co-occurrence of animal and human abuse is needed in non-western countries however.

Following on from this, if it is true that children who learn to be violent to animals will, in turn, become adults who are violent to people (and animals), then it is logical to consider that HE might help children to learn *not* to be violent to animals, and so minimise the risk of them becoming violent adults.

#### Slide 10:

It seems reasonable to hypothesise that AWE could help both to protect animals from abuse by children and, in turn, prevent those children from becoming violent adults.

Because it can be used as a preventative measure, and is relatively simple to do, AWE might potentially provide a more effective and sustainable solution in the long term in comparison to the use of legislation to regulate adults that are known to demonstrate violent behaviour.

As a vet you have a role to play in looking out for evidence of animal abuse, and in reporting it to the appropriate authorities (Benetato et al., 2011). This is covered in Module 30, on human–animal interactions. What is clear is that people experiencing violence in a home where animals are abused too, may be unwilling to confide in veterinarians or to seek help from animal shelters (Tiplady et al., 2012). This puts more emphasis on the vet to proactively consider animal abuse as a differential diagnosis in relevant cases. The next slide gives you a brief idea of how often vets in certain countries believe they see cases of animal abuse in practice.

#### Slide 11:

These studies indicate that at least half of responding vets believe they have seen cases of animal abuse in the UK and 63% of vets in New Zealand reported having seen cases of animal abuse within the five years prior to being surveyed.

Additionally it seems that about one animal patient in every 100 presented to the vet is estimated to be the victim of animal abuse.

More research is needed and in a range to countries to ascertain the extent to which vets are encountering animal patients that have been subjected to abuse. The key take home point from this is that as practising vets, you will be well poised to identify suspected cases of animal abuse (as a differential diagnosis) and, as animal welfare educators, to act in order to break the cycle of violence and promote the humane treatment of both animals and humans.

Next we will consider the inclusion of animal welfare within the veterinary curriculum and the effects this could have.

#### Slide 12:

As described at the start of this lecture, in some countries the transition from being a veterinary student to a recognised veterinary professional requires a verbal commitment to safeguard animal welfare (Bones & Yeates, 2012).

Therefore, AWE plays a key role in equipping vets in training and in practice with the necessary knowledge, skills and values to fulfil their professional oath: committing to protect, promote and ensure animal welfare and prevent suffering.

As you evolve into professional vets, you also need to evolve into animal welfare educators in order to support and encourage your peers, clients and key organisations to understand how to promote good standards of welfare for animals.

The public perceive veterinarians as experts on animal welfare and therefore it has been argued that all veterinary students should have the opportunity to study animal welfare during their training to make them (you) better able to meet these public expectations as practitioners (Lord et al., 2012).

In the following slides we will examine how AWE can feature within the veterinary curriculum – note that if you are listening to this lecture, your faculty is including AWE within its curriculum. However we will first consider some research which indicates that the attitudes of veterinary students and professionals towards animals and animal welfare may not always help support the safeguarding of animal welfare.

#### Slide 13:

Research in the 1990s indicated that there were rumblings of a "hardening effect" within veterinary education, with students showing less concern for the wellbeing of animals as they progress through the course. Both an English (O'Farrell, 1990) and an Australian study (Blackshaw & Blackshaw, 1993) found that veterinary students viewed qualified vets as generally 'tough-minded' and pet owners as generally emotional and 'tender-minded' in their attitudes towards animals. Students themselves appeared to become increasingly tough-minded as they progressed through their course.

More latterly, a US survey indicated a link between progression through veterinary education with a reduced likelihood of providing animal patients with analgesia following surgery, although the vet students as a whole where more likely than faculty and staff to administer analgesics after routine surgical procedures (Hellyer et al., 1999).

Following these suggestions of veterinary education having a 'hardening effect', a UK study in 2000 (Paul & Podberscek, 2000) sought to determine whether a supposed hardening effect could be associated with a decline in belief in animal sentience with progression through veterinary education. This cross-sectional study examined the attitudes of veterinary undergraduates during their five years of training and specifically examined their belief in animal sentience across the first preclinical, first clinical and final year of study at two universities. During the training there was a reduction in the degree of sentience ascribed by both male and female students to animals during later years of study. This indicates that male and female students may converge in terms of cognitive components of attitudes towards animals during veterinary education. This study also indentified significant differences between the students from the two vet schools with regards to their view of animal sentience for different species – indicating an effect of a specific vet school sub-culture.

Some of the studies mentioned highlight that veterinary education itself might be associated with 'emotional hardening' and diminishing belief in animal sentience or ability to feel pain. It has been proposed that viewing animals in increasingly Cartesian 'machine-like' terms may fulfil cultural expectations associated with a rational, objective and scientific education. It has been proposed that emotional hardening could function as a coping mechanism for moral conflict and emotional distress encountered by veterinary students and vets when trying to meet the conflicting needs of the animal and the animal's owner.

A more recent study (Özen et al., 2009) sampled vet students and faculty from three separate Turkish universities and found that the percentage of female participants who thought that mammals and birds feel pain was higher than that of males. Additionally, the percentage of the educators who answered 'yes' to the question "Do animals have emotions" was higher than that of students for reptiles and fish. The authors believe this demonstrates that increased education level and professional experience affects attitudes towards animals positively and is due to an increased level of knowledge.

Cultural differences in the attitudes of veterinary faculty towards animal welfare have also been indicated. For example, faculty members in veterinary schools in Turkey and Australia have been found to prioritise different welfare issues; these then shape the attitudes of their respective veterinary students (Izmirli & Phillips, 2012).

We will now briefly examine the effects of incorporating AWE into the veterinary curriculum.

#### Slide 14:

There is still very little research on the impact of AWE on students who are training to work with animals, including vet students, and much of the research that exists uses small sample sizes which make it difficult to make generalisations from the findings.

A study conducted at one veterinary school in the US used an online survey to compare the knowledge and attitudes of (a) veterinary students who voluntarily enrolled in and completed a discussion-based animal welfare elective course with (b) veterinary students who had not (Lord et al., 2010). No significant difference was found between the two groups in terms of their knowledge of animal welfare specific to the scenarios explored within the elective course. However, students who completed the elective course reported feeling more comfortable with the prospect of educating themselves on animal welfare scenarios and also scored significantly higher in identifying welfare factors (physical functioning, ability to exist in a natural state, mental state/feelings) compared to the students that did not take the course. This study highlights that "...even limited exposure to animal welfare assessment is important in empowering veterinary students to educate themselves about welfare issues pertaining to a variety of species" (Lord et al., 2010).

An Australian study indicated that teaching vet students a course on welfare and ethics had a positive impact on their attitudes to animals (Hazel et al., 2011), while another study has shown that most veterinary students attending an animal welfare and ethics course found it to be challenging and effective and felt they improved their ability to identify and discuss ethical dilemmas (Abood & Seigford, 2012).

#### Slide 15:

A potentially significant barrier to the comprehensive incorporation of animal welfare into the veterinary curriculum is the existence of a 'silent curriculum'. In the context of human–animal interactions, the silent curriculum has been defined as "intended or unintended teaching or learning effects of schooling that are not stated as aims in formal documents, but forms part of a socialisation process into certain human–animal relations" (Pedersen, 2010). The formal curriculum may aim to improve conditions for animals in society, while the silent curriculum may implicitly support contradictory learning.

The existence of a silent curriculum has become a focus within research concerning human medicine during the last decade. The findings there indicate that medical students see their teachers as role models and these students reported a hierarchical and competitive atmosphere with teaching practices in which humiliation occurs and 'emotional neutrality' may be encouraged (Lempp & Seale, 2004).

Emotional neutrality as a learning outcome of a silent curriculum would clearly contradict the intended explicit learning outcomes of an HE programme that aims to encourage compassion and empathy in people's dealings with other people, animals and the environment. When a veterinary educator in a position of authority demonstrates a technique or method of interaction with an animal, students may learn that form of activity to be acceptable (Jukes & Chiuia, 2003; Martinsen & Jukes, 2005). The socialisation processes that underpin a hidden curriculum can incorporate certain skills and knowledge but also emotional responses and ways of thinking (emotional socialisation), (Paul & Podberscek, 2000; Izmirli & Phillips, 2012).

In many instances this could have a negative influence on attitudes towards animals but a silent curriculum can also act as a vehicle for positive and humane messages about human-animal interactions. For example, if a veterinary medical school endorses and uses alternatives to animals in its teaching practices then this not only embeds HE into the formal curriculum, it also establishes a silent learning outcome where students are encouraged to consider and facilitate good animal welfare in the context of their learning.

In the next slide we will further examine what a silent curriculum might look like within the context of veterinary medicine.

## Slide 16:

Based on what we have discussed in relation to the silent curriculum in human medical education and schools, it could be entirely possible that a silent curriculum acts as a vehicle for positive and humane messages about human–animal interactions within the context of veterinary education. There is however a limited amount of research examining the nature of the silent curriculum within veterinary medical education.

Tiplady et al. (2011) found that as veterinary students at one university in Australia progressed through their education they became more accepting of and preferred using euthanized 'unwanted' (but otherwise healthy) dogs that had been sourced from pounds or greyhound racing kennels over donated cadavers for anatomy dissection classes. The authors cite that

this may be due to increased acceptance of euthanasia of healthy animals in general, a decline in moral development, desensitisation or the belief that healthy animal cadavers provide a superior learning experience.

Although relative to first year students, third year students and fifth year students showed higher preference for pound-dog/greyhound cadavers over donated cadavers, as this was not a longitudinal study where the same students were repeatedly surveyed over time, this does not equate to definitively showing an increased acceptance of the euthanasia of unwanted healthy animals as they progress through the veterinary programme.

Anecdotal accounts of student concern and stress associated with engaging in surgical procedures during veterinary education have also been published (Herzog, 1989). In this study, veterinary students nearing graduation were asked to reflect back on their experiences. Results showed that they suffered distress during their training when performing cosmetic procedures on companion animals, including ear cropping and tail-docking of dogs and declawing of cats. Students also reported experiencing strong emotional reactions in relation to surgical procedures performed on food animals without anaesthesia including castration, dehorning of cattle and tail-docking of pigs. Overall these students accepted that these types of surgical treatments and procedures were necessary parts of their training, but they seemed to be experiencing stress as part of the process of coming to terms with it.

Reviews of the existing literature concerning the use of alternatives to animals in veterinary education and the effects on student satisfaction and learning have also been published. It has been suggested that by incorporating humane alternatives to animal use in teaching, veterinary educators can maximise quality of learning in students whilst promoting good animal welfare and minimising costs and time constraints associated with greater animal use (Knight, 2007).

It has also been documented that veterinary students may experience significantly high levels of stress during veterinary education. Veterinary students report that this is in part related to some of the procedures that they witness and must perform during their education that compromise animal welfare or challenge their moral values (Herzog et al., 1989). Research indicates that in order to not experience emotional conflict in relation to how animals are used, those that work with them may employ 'distancing strategies' and try to remain as detached as possible (Arluke, 1992). Other factors clearly also have an influential effect on student stress levels, such as the intensity of study and hours that they are required to work and sustain along with financial concerns (Hafen et al., 2008). Further research is needed to examine whether there is a significant relationship between veterinary student stress arising from animal welfare concerns and their general mental wellbeing. If a clear link is evidenced then it is plausible to suggest that veterinary students studying at a vet school where the principles of HE and alternatives to animal use are embraced may be happier and healthier.

We will now briefly consider the research examining the effects of using alternatives to animals in veterinary education.

### Slide 17:

Alternatives to animals in veterinary teaching scenarios exist and range from technologically advanced computer simulators to desk-top models.

The use of alternatives to animals during veterinary education has been reviewed and indicates that they help to engender respect for life and that the benefit of using these alternatives extend beyond the animals themselves to veterinary students, educators, the veterinary profession and society in general (see Jukes & Chiuia, 2003 and Martinsen & Jukes, 2005 for a detailed review).

It has been shown that veterinary students taught with the 'haptic cow' simulator (developed by Sarah Baillie) performed significantly better when set the task of locating the uterus in real cows than a control group of veterinary students. Therefore the skills learned in the simulated environment transferred to the real task (Baillie et al., 2005 & 2010). If you want to learn more about the haptic cow simulator there are videos on YouTube that you can search for.

There are movements in various vet schools in different countries to increase the ethical review processes in relation to the use of animals in education. For example, approximately 4,845 animals (20 different species) were used in veterinary medical education in Korea in 2007 and veterinary schools are now increasingly introducing ethical protocol review systems prior to animal use (Lee et al., 2010).

We will now move on to review how qualified vets working in practice act as animal welfare educators.

#### Slide 18:

Once qualified as a veterinary practitioner you will be in a position of responsibility and authority and as such your advice and actions will serve to educate those you come into contact with. This slide summarises just some of the scenarios you may find yourself in with regard to being an animal welfare educator.

If you specialise in the subject you may be called upon to advise governments and authorities on policy and decision making. There are also growing numbers of opportunities for vets to gain continuous professional development in the field of animal welfare, as well as specially designed vocational courses in areas such as livestock handling, transport, and humane slaughter training for animal handlers. These courses need to be taught by vets that are competent and knowledgeable in the field of animal welfare.

Finally, and most importantly, whether you become an animal welfare specialist or not, you will be educating the public. As the local vet, you may be the only one with expert knowledge about animals and animal welfare, and you will be asked for your opinion about these issues. You will also be well-placed to find out about local animal welfare problems, among livestock, working draught animals and companion animals.

Whether you work in the community or in a corporate or inspector role, you will be in a good position to investigate how your clients or colleagues can address animal welfare problems.

Here, you can also lead by example, always showing a compassionate attitude and using your scientific knowledge of animals' sensory perceptions and their behaviour to handle them humanely.

Your interactions with clients are very likely to form your most immediate and most obvious demonstration of AWE so we will investigate this further on the next few slides.

#### Slide 19:

Families and individuals visit veterinary clinics for professional advice and guidance. Attendance at clinics focuses around the care of small companion animals. Each encounter with animal owners is an opportunity for you to encourage them to take positive attitudes towards their animal/s. If owners appear to have negative attitudes as a result of their animal showing an undesirable behaviour (e.g. house soiling) then this is an ideal opportunity to educate and advise the owner on reasons for the behaviour and possible solutions.

Another important area to be addressed through public education is the malnutrition of young pet animals, which is commonly due to inadequate protein levels in the diet. You can influence this by telling owners how to feed weaned puppies and kittens appropriately. You can advise owners on the needs of their pets, including the need for exercise, companionship and proper amounts of the right food and water. Again, providing advice about animal behaviour and about preventing undesired behaviours in a humane way is extremely important so that the owners do not simply abandon the animal or relinquish the animal to a shelter without having tried to solve the problems.

You can also ensure that there is information to hand out to clients on animal care and welfare, e.g. leaflets about tail docking dogs, declawing cats, the problems of 'rescuing' uninjured wild animals etc.

## Slide 20:

Many vets around the world work in the field, particularly dealing with large animals or livestock on farms. Giving advice to owners provides another opportunity to influence animal care. In many countries women and young people will be caring for livestock so it is important to include them.

Veterinarians can also help animal owners to take pride in:

- treating their animals well
- understanding their animals' needs
- teaching other people about how they care well for their animals vets can achieve this simply by noticing and encouraging all the good points about the way that animals are kept.

For example, many draught animals suffer from chronic sores and skin lesions as a result of ill-fitting harnesses. A lot of work has been done to design harnesses that do not cause sores, and you can encourage farmers to adopt the use of improved harnesses. Another example is the use of halters rather than foot tethers for donkeys.

## Slide 21:

When advising your clients it is important to highlight that improving animal welfare is a good investment, because there are many examples where animal welfare and animal production are linked. For example, parasitic disease causes poor welfare because affected animals are dull and lethargic and may suffer from diarrhoea that, in turn, reduces growth rate and productivity, and may cause deaths and may increase susceptibility to other diseases. Control of parasitic disease therefore both improves welfare and improves the production level of animals.

When educating clients, it is important to be sensitive to their values and traditions, as well as the socio-economic conditions which prevail. Solutions to problems must be practical and feasible, and they must take into account the owners' resources. You must be prepared to listen to clients, especially to farmers who will often have thought a lot about the problems they face with respect to the care of their livestock.

If you are trying to bring about lasting changes, it is best to target members of the community who are most likely to embrace change. Once they have introduced new technology or improved working practices, others will learn by example. Among farmers, it is often best to start working with those who have shown that they are keen to improve their stock. They are more likely to accept new ideas and more likely to be successful.

#### Slide 22:

In order for your consultation to be considered effective AWE, the owner of the animal must demonstrate behaviour change. Simple information exchange does not count as animal welfare education.

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 then advises the owner what to do. However, with both pets and farm animals, vets find that owners rarely do everything that the vet has recommended, i.e. the owner is to a greater or lesser extent '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, even though the vet had a lot of knowledge and passed it on to the owner, the animal did not benefit.

Researchers are beginning to study this, and it is becoming clear that compliance levels are better if vets have a two-way dialogue with their clients and take time to understand their perspective on the problem. Then, the owner is more likely to feel like part of the solution for their animal and the vet can make sure that his/her advice is tailored to the individual client.

#### Slide 23:

One example of the research into non-compliance of owners concerns dairy farmers' compliance with their vets' advice about mastitis and herd health. In many countries, the national prevalence of subclinical mastitis has not changed much, even though scientific research indicates what the risk factors are and has offered proven 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 despite receiving veterinary advice on how to reduce the problem, many farmers do not take sustained action and the problem remains.

In a review from 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 what his or her mindset is 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 is needed and 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 24:

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

In an earlier 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 themselves valued teamwork and animal welfare more than production and profit, and they indicated that they 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 variation in how different stakeholders may rank the importance of financial considerations comes from a survey of smallholder llama farmers in Bolivia. This found that the women appreciated having the animals for their dung rather than for their economic value, because they needed the dung for cooking fires. In contrast, the men put higher value on the animals' monetary value, either to generate routine cash or in case of needing to generate cash urgently (Markeman et al., 2009).

## Slide 25:

In summary, animal owners may more readily engage in making changes to improve animal welfare if the vets adopt an encouraging (rather than lecturing) approach. Your approach should aim to:

- pass ownership of the problem and solution to the farmer
- give farmers the opportunity to mentally rehearse any changes they might make and even encourage them to try out changes before fully implementing them
- encourage farmers to discuss their problems with colleagues on other farms.

Another form of community engagement that encourages human behaviour change is called social marketing. It is comprised of a number of key components which include:

#### Benefits and barriers

Knowing the benefits and barriers to change. These must be benefits and barriers as perceived by the farmer, not assumed by you, the vet.

#### Facilitation

Helping people come to the answers themselves rather than telling them the answer. People are more likely to change their behaviour if they think it is their own idea.

#### Norms

Defining the change in behaviour as socially accepted or 'normal' behaviour within the community. People are more likely to change behaviour if they know others have done the same.

#### Commitment

Commitment is the key to sustaining behaviour change. Commitments that are made publically are more likely to be kept.

#### Prompts

Prompts act to remind people of agreed activities and help sustain the new behaviour.

#### Incentives

Incentives act as powerful tools to help motivate people to earn rewards or avoid penalties.

For further information about using encouragement within AWE to help bring about human behaviour change that improves welfare, see Whay and Main (2010).

An interesting extension to the role that vets play in animal welfare education is considering the extent to which vets should try to influence their clients to make welfare focused decisions about available treatment options. We will explore further in the next slide.

#### Slide 26:

As practitioners and animal welfare educators, vets inevitably experience a difficult time ensuring that they fulfil their commitments to meeting the needs of the animal and those of their clients (the animal's owner).

There are a number of veterinarians that work within universities and as members of governmental and policy groups that consider it the veterinarian's role to proactively influence clients to improve animal welfare by managing animals in their care as humanely as is possible within their means (Main, 2011). This approach is nested in the overall philosophy that the veterinary profession has a key role to play in promoting action that will address animal welfare and environmental concerns for the good of society as a whole.

It has also been argued that vet students should receive training in human behaviour change during their education so that they are suitably equipped with the necessary skills upon graduation (Main, 2011).

#### Slide 27:

This slide summarises what we have covered today about the vet's role as an animal welfare educator.

Animal welfare education is an increasing field in its own right. As vets, you will find yourself in a position of authority with responsibility as an animal welfare educator. This element of your role is likely to be effective if you communicate well and engage in effective dialogue with clients.