Animal Welfare Science and Bioethics Centre

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Collaborating Centre for Animal Welfare Science and Bioethical Analysis:
Founding Partner

http://animalwelfare.massey.ac.nz
Evolving Veterinary Education for a Safer World

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Animal Pain and OIE Guidelines

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Areas considered

- Domains of animal welfare compromise
- Focus on affect or ‘feelings’
- Significance of pain
- Pain and veterinary education
- OIE Guidelines and animal pain
Areas considered

- **Domains of animal welfare compromise**
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- OIE Guidelines and animal pain
Domains of animal welfare compromise

- **The Five Domains concept – Mellor & Reid 1994**
  - Domain 1: Nutrition Physical/functional
  - Domain 2: Environment
  - Domain 3: Health
  - Domain 4: Behaviour
  - Domain 5: Mental state Affect/‘feelings’
Domains of animal welfare compromise

- **The Five Domains concept – Mellor & Reid 1994**
  - Domain 1: Nutrition Physical/functional
  - Domain 2: Environment
  - Domain 3: Health
  - Domain 4: Behaviour
  - Domain 5: Mental state Affect/‘feelings’

- Five domains give comprehensive coverage
- Welfare - to date, mainly an absence of negative states
  - now, also the presence of positive states
Areas considered

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- **Focus on affect or ‘feelings’**
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Focus on affect or ‘feelings’

• Animal welfare = What the animal *experiences*
  = Its *affective state* or ‘feelings’

• ‘Feelings’ can be *negative, neutral or positive*

• Welfare compromise = *Presence of negative ‘feelings’*
  = *Absence of positive ‘feelings’*

• At present, *we still largely focus on negative ‘feelings’*
  
  For example:
Focus on affect or ‘feelings’

PHYSICAL COMPONENTS

Domain 1
Water deprivation, food deprivation, malnutrition

Domain 2
Environmental challenge

Domain 3
Disease, injury, functional impairment

Domain 4
Behavioural or interactive restriction

MENTAL COMPONENTS

Domain 5
Thirst
Hunger
Nausea
Pain (short-lived)
Fear
Anxiety (transient)
Frustration (transient)
Debility
Weakness
Sickness
Pain (moderate)
Breathlessness
(transient, curable)
Dizziness
Loneliness
Helplessness
Boredom
Pain (persistent, untreatable)
Breathlessness (incurable)
Anxiety (persistent)
Frustration (persistent)
Distress

Animal Welfare Status
Focus on affect or ‘feelings’

*Pain is a potent negative feeling*

We will consider that now
Areas considered

• Domains of animal welfare compromise
• Focus on affect or ‘feelings’
• Significance of pain
• Pain and veterinary education
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Significance of pain

Attributes of Pain:

• It can be a most unpleasant experience in humans
• Depending on its intensity, duration and character it can cause great suffering
Significance of pain

Attributes of Pain:

• It can be a most unpleasant experience in humans
• Depending on its intensity, duration and character it can cause great suffering
• Most veterinarians now accepted that animals can feel pain and may suffer as a result
• Pain has many causes – injuries and pathological states
• So it has many manifestations; for example
# Manifestations of pain

<table>
<thead>
<tr>
<th>Aching</th>
<th>Burning</th>
<th>Beating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throbbing</td>
<td>Shooting</td>
<td>Bursting</td>
</tr>
<tr>
<td>Boring</td>
<td>Sharp</td>
<td>Smarting</td>
</tr>
<tr>
<td>Drawing</td>
<td>Hot iron</td>
<td>Electricity</td>
</tr>
<tr>
<td>Pulling</td>
<td>Soreness</td>
<td>Stinging</td>
</tr>
<tr>
<td>Gripping</td>
<td>Knife-like</td>
<td>Pricking</td>
</tr>
<tr>
<td>Cramping</td>
<td>Stabbing</td>
<td>Needle-like</td>
</tr>
<tr>
<td>Nagging</td>
<td>Toothache</td>
<td>Tingling</td>
</tr>
<tr>
<td>Sense of pressure</td>
<td>Tearing</td>
<td>Itching</td>
</tr>
<tr>
<td>Gnawing</td>
<td>Hot cords</td>
<td></td>
</tr>
</tbody>
</table>

Significance of pain

Attributes of Pain:

- Pain may also be:
  - Acute
  - Chronic
  - Localized
  - Generalized
  - Physical
  - Emotional
  - Adaptive
  - Maladaptive

- More than one type can be present at the same time
Significance of pain

Attributes of Pain:
• Focusing on pain avoidance and pain management therefore covers many causes of welfare compromise
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• This contrasts with the far fewer individual causes of thirst, hunger, nausea, breathlessness and sickness.

• Of course, these ‘feelings’ are important and do merit attention, but, as a strategy, initially focusing on pain may be more effective in promoting good animal welfare practices.
Significance of pain

Attributes of Pain:

• Focusing on pain avoidance and pain management therefore covers many causes of welfare compromise
• This contrasts with the far fewer individual causes of thirst, hunger, nausea, breathlessness and sickness
• Of course, these ‘feelings’ are important and do merit attention, but, as a strategy, initially focusing on pain may be more effective in promoting good animal welfare practices
• Moreover, pain is easily understood by most people as having the potential to be extremely unpleasant
• But making a strong link between human experience and animal pain experience will be important.
Significance of pain

Attitudes towards Pain:

• Progression in dominant ideas about pain:
  – Animals do not feel pain: until about 30 years ago
  – Animals might feel pain, but we are not sure: last 25-30 years
  – Animals do feel pain: increasing during the last 10-15 years

• Globally, all three still exist among animal users/owners, but the ‘might’ and ‘do’ ideas are much more common.
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• But commitment to pain management practices is variable:
  – Companion animal clinics
  – Farms
  – Zoos and game parks
  – Wildlife control and conservation
  – Laboratories
Significance of pain

Attitudes towards Pain:

• Companion animal clinics:
  – *Pain relief* is used increasingly
  – Rising pressure from *animal owners and the profession*
  – *More analgesics* are available
  – *Dose rates and dosing strategies* better understood
  – Increasing numbers of *clients are prepared to pay*
  – Emphasis in *UG and PG veterinary teaching would accelerate* these developments
Significance of pain

Attitudes towards Pain:

• Companion animal clinics

• Farms
  – Traditionally, pain relief has not been provided for tissue-damaging procedures on farms
  – Economic, practical, safety, regulatory, etc, objections raised
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  – Growing knowledge of farm animal pain and its management
  – Result: analgesic use on farms is increasing – but slowly
Significance of pain

**Attitudes towards Pain:**
- Companion animal clinics
- **Farms**
  - *Traditionally*, pain relief has not been provided for tissue-damaging procedures on farms
  - Economic, practical, safety, regulatory, etc, *objections raised*
  - *Rising public pressure* for pain relief to be applied to livestock
  - *Rising demand from food importing companies*
  - *Growing knowledge* of farm animal pain and its management
  - Result: analgesic use on farms is increasing – *but slowly*
  - *Teaching programmes*, directed at practicing vets and at UGs, will accelerate this trend
  - Positive statements by *national animal welfare advisory bodies* will also help
Significance of pain

Attitudes towards Pain:

• Companion animal clinics
• Farms
• Zoos and game parks
  – *Improved and common practices for companion and farm animals will be applied*
  – There are *problems of unknown dose rates and safe access*
  – *Direct studies of analgesic actions and use in such animals will enhance analgesic use*
Significance of pain

Attitudes towards Pain:

• Companion animal clinics
• Farms
• Zoos and game parks
• Wildlife control and conservation:
  – *Minimising the pain/distress caused by non-lethal and lethal vertebrate ‘pest’ control methods is increasingly emphasised*
  – ‘Pest’ animals can still experience pain and suffer
  – The pain-producing potential of identification marking methods for valued and endangered wildlife is receiving attention
Significance of pain

Attitudes towards Pain:

- Companion animal clinics
- Farms
- Zoos and game parks
- Wildlife control and conservation
- Laboratories:
  - *Animals used* – all above + guinea-pigs, mice, rats, rabbits, etc.
  - *Ethical responsibility and regulatory requirement* to minimise pain, distress or lasting harm caused are well-recognised
  - The *Three Rs Principle* widely applied – but needs to be more
  - *Comprehensive method to assess negative impacts* is available
  - Care of lab animals should be part of vet education
  - *Laboratory Animal Medicine* is a recognised vet speciality
Significance of pain

Summarising attitudes towards Pain:
• Vary in different contexts
• Commitment to pain management in all of these contexts could be improved worldwide
• Increasing knowledge of animal pain and its management will help
• *Increasing the attention given in veterinary education to animal pain, its management and how it compromises animal welfare will also help.*
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Pain and veterinary education

Some key elements to be included:

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Pain and veterinary education

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• Features of pain and its management in animals:
  – Different contexts in which pain can occur
  – Causes and types of pain
  – Pain recognition
  – Pain mechanisms and their manipulation to control pain
  – Administration of pain-relieving drugs
  – Pain-alleviation methods that are easy to use, practical and economically realistic in the context of their use.
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• Recognise that pain is only one of numerous negative ‘feelings’ animals may experience:
  – Thirst, hunger, nausea, breathlessness, sickness, anxiety and fear being some others
Pain and veterinary education

Animal welfare and pain in veterinary education:

• Some veterinary schools have very well-developed programmes
• Some may emphasise pain but not animal welfare
• Some may want to increase the attention given both to animal welfare and to pain and its management
Pain and veterinary education

**Animal welfare and pain in veterinary education:**

- Some schools have *very well-developed* programmes
- Some may *emphasise pain* but not *animal welfare*
- Some may want to increase the attention given both to *animal welfare* and to *pain and its management*

- Some schools may want advice about or support with introducing greater coverage of these topics in their curriculums:
  - Personal contacts and exchange visits can be helpful
  - More animal welfare texts are being published
  - Texts on pain and its control in animals are also available
  - WSPA course on animal welfare and ethics
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OIE Guidelines and animal pain

OIE Global guidelines on animal welfare:
• Deal with management of the wider dimensions of welfare
• But there is a significant focus on minimising pain and distress
OIE Guidelines and animal pain

**OIE Global guidelines on animal welfare:**

- Deal with management of the *wider dimensions of welfare*
- But there is a *significant focus on minimising pain and distress*
- Prepared by *international experts* and vetted by the *OIE membership*, these guidelines embody the *latest thinking* in the specific areas covered:
  - Transport by land, seas and air
  - Slaughter for human consumption
  - Killing for disease control
  - Stray dog control
  - Transport of farmed fish
  - Laboratory animals/broiler chickens/beef cattle – are in preparation
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• These could be used as a focus or a starting point educationally
OIE Guidelines and animal pain

Also – OIE Technical Series Volume 10, 2008
OIE Guidelines and animal pain

OIE Collaborating Centre for Animal Welfare Science and Bioethical Analysis – a bi-national centre

– Animal Welfare Science and Bioethics Centre (Massey University, NZ)
– Animal Behaviour and Welfare Research Centre (AgResearch, NZ)
– Animal Welfare Science Centre (Melbourne University, Australia)
– Centre for Animal Welfare and Ethics (Queensland University, Australia)
– CSIRO Livestock Division Animal Welfare Group (NSW, Australia)

• Considerable expertise on the science of animal pain and its management is available within the five partners groups of this Collaborating Centre.
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• Clearly, wide-ranging expertise is also available on numerous other aspects of animal welfare science and animal welfare education within this OIE Collaborating Centre.
OIE Guidelines and animal pain

There are two additional OIE Collaborating Centres that deal with Animal Welfare

- Veterinary Training, Epidemiology, Food Safety and Animal Welfare (Teramo, Italy)
- Animal Welfare Research (a bi-national Centre involving veterinary faculties in Valdivia, Chile and Montevideo, Uruguay)
Summary of OIE Contributions

The OIE therefore contributes on a global scale, both directly and indirectly, to improvements in our understanding of animal pain and its management.

Its published resources can be used in related educational initiatives in veterinary schools that wish to use them.

To date, the OIE has recognised three Collaborating Centres with expertise in many aspects of animal welfare and thereby OIE members have access to that expertise.

Their contact details are available on the OIE web site.
Thank you