Outcomes of a web-survey to collect stakeholders’ opinion on welfare requirements for horses

Dai F\textsuperscript{1}\textsuperscript{*}, Tranquillo M\textsuperscript{2}, Dalla Costa E\textsuperscript{1}, Barbieri S\textsuperscript{1}, Canali E\textsuperscript{3}, Minero M\textsuperscript{1}

\textsuperscript{1}Università degli Studi di Milano, DiMeVet, Italy
\textsuperscript{2}IZSLER, Sezione Diagnostica di Bergamo, Italy
\textsuperscript{3}Università degli Studi di Milano, DiSAA, Italy

*francesca.dai@unimi.it
Introduction
The Animal Welfare Indicators (AWIN) project
Introduction
The Animal Welfare Indicators (AWIN) project

(Welfare Quality®, 2009)
Ensure a good acceptance of protocols
Material & Methods
The online survey

Farmers’ experience is crucial to develop welfare assessment protocols and to assure their acceptability and feasibility on farm. Farmer participation promotes awareness of animal welfare issues, focused on animal-based indicators. A participatory approach can promote the collaboration within stakeholders, increasing the likelihood of bringing about changes, maintaining them independent of premium price or certification purposes, and assuring the effectiveness and the sustainability of the assessment procedures.

Together we can improve productivity and welfare of farmed animals in Europe. We need your point of view in order to identify indicators that you consider important for assessing and monitoring animal welfare. Please find 5 minutes to answer this short questionnaire.

- Multi-language web-survey
- 14 open questions about appropriate requirements to guarantee high levels of horse welfare on farm
- Text mining
In your opinion, what do horses need to be good, healthy and productive?

How does a horse act and react in each of the following situations?
- In the presence of a noise
- Isolated from the group
- In the presence of animals/persons known
- In the presence of unknown animals/persons

Looking at your neighbor's horse, what signs would you identify, to evaluate feeding conditions?
Looking at your neighbor's horse, what signs would you identify, to evaluate health conditions?
Looking at your neighbor's horse, what signs would you identify, to evaluate the manifestation of normal behavior?
Looking at your neighbor's horse, what signs would you identify, to evaluate the manifestation of abnormal behavior?
Results and discussion

Participants

122 surveys
- 30% Italy
- 15% UK

- most of the participants were women (85%)
Results and discussion

Participants

![Bar chart showing age distribution of participants]
Results and discussion

Participants

- Veterinarian: 35.2%
- Owner: 33.6%
- Breaker: 13.1%
- Technician: 11.5%
- Farmer: 6.6%
Results and discussion
Text analysis

In your opinion, what do horses need to be good, healthy and productive?
In your opinion, what do horses need to be good, healthy and productive?

Welfare Principle *Good Feeding*:
- considered the most relevant
  - Water (n=40)
  - Feed (n=35)
In your opinion, what do horses need to be good, healthy and productive?

Welfare Principle *Good Housing*:
- Importance of the shelter (n=31)
- Pasture is mentioned only 18 times
In your opinion, what do horses need to be good, healthy and productive?

Welfare Principle *Good Health*:
- Care (n=24)
- Health (n=20)
Results and discussion

Text analysis

In your opinion, what do horses need to be good, healthy and productive?

Welfare Principle

Appropriate Behaviour:
- Training (n=23)
- Company (n=16)
### Results and discussion

What is in the AWIN Welfare assessment protocol for horses?

<table>
<thead>
<tr>
<th>Welfare principles</th>
<th>Welfare criteria</th>
<th>Welfare indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Good Feeding</strong></td>
<td>Appropriate nutrition</td>
<td>Body Condition Score</td>
</tr>
<tr>
<td></td>
<td>Absence of prolonged thirst</td>
<td>Water availability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bucket test</td>
</tr>
<tr>
<td><strong>Good Housing</strong></td>
<td>Comfort around resting</td>
<td>Bedding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Box dimensions</td>
</tr>
<tr>
<td></td>
<td>Thermal comfort</td>
<td>Not considered for single stabled horses</td>
</tr>
<tr>
<td></td>
<td>Ease of movement</td>
<td>Exercise</td>
</tr>
<tr>
<td><strong>Good Health</strong></td>
<td>Absence of injuries</td>
<td>Integument alterations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Swollen joints</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lameness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prolapse</td>
</tr>
<tr>
<td></td>
<td>Absence of disease</td>
<td>Hair coat condition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discharges</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consistency of manure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abnormal breathing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coughing</td>
</tr>
<tr>
<td></td>
<td>Absence of pain and pain induced by management procedures</td>
<td>Horse Grimace Scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Signs of hoof neglect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lesions at mouth corners</td>
</tr>
<tr>
<td><strong>Appropriate Behaviour</strong></td>
<td>Expression of social behaviour</td>
<td>Social interaction</td>
</tr>
<tr>
<td></td>
<td>Expression of other behaviours</td>
<td>Stereotyplies</td>
</tr>
<tr>
<td></td>
<td>Good human-animal relationship</td>
<td>Fear test</td>
</tr>
<tr>
<td></td>
<td>Positive emotional state</td>
<td>Human-animal relationship tests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Qualitative Behaviour Assessment</td>
</tr>
</tbody>
</table>
Conclusion

➢ Stakeholders’ involvement is fundamental for any action intended to improve animal welfare

➢ This work portrays the stakeholders’ perception of horse welfare

➢ The results showed that horse stakeholders consider welfare primary linked with appropriate feeding

➢ Allowing the possibility to interact with conspecifics and spend time at pasture is paramount to guarantee horse welfare
Thank you for your attention!