Bovine dummy models for training of reproduction techniques

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SCOPE OF THE METHOD

<table>
<thead>
<tr>
<th>The Method relates to</th>
<th>Animal health</th>
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<tbody>
<tr>
<td>The Method is situated in</td>
<td>Education and training</td>
</tr>
<tr>
<td>Type of method</td>
<td>Other</td>
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<tr>
<td>This method makes use of</td>
<td>Other (e.g. bacteria)</td>
</tr>
</tbody>
</table>

DESCRIPTION

Method keywords
- veterinary medicine
- skillslab training
- dummy
- Bovine
- calving
- insemination
rectal palpation

**Scientific area keywords**

Veterinary education  
clinical training  
Preclinical model

**Method description**

In the skillslab, dummy models and simulators are used for teaching various clinical skills. The veterinarians in training need to learn how to assist the calving process in the cow and how to perform artificial insemination and rectal palpation in cows. Although training on living animals is indispensable, a part of the training process can be performed on bovine dummy models in the skillslab.

**Lab equipment**

Home-made and commercial models:  
- calf models (adapted from Melissa and Doug and VSI calf) in iron fantom (cow)  
- adapted Bovine Breeder (realityworks.com): model for insemination and rectal palpation.

**Method status**

Still in development  
History of use  
Internally validated

**PROS, CONS & FUTURE POTENTIAL**

**Advantages**
The use of educational animal models in a skillslab offers a number of significant advantages:
- Reduced use of laboratory animals and reduced discomfort for patients, as procedures can be practised on dummy models and simulators before performing them on a live animal.
- Teaching of clinical skills in a quiet and safe environment, reducing anxiety and stress for the veterinary student.
- Complex practical skills can be split into a number of small steps when practising them in the skillslab.

**Challenges**

- High cost of models,
- Clinical training on live animals needed as well.

**Modifications**

Further optimalisation of home-made models and purchasing available commercial models. Virtual/augmented reality can be added.

**Future & Other applications**

Training for lab animal procedures

**REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION**

**Associated documents**

kalf.jpg

**PARTNERS AND COLLABORATIONS**
Organisation
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