Effect of a high intensity one-week training program on the bovine trans-rectal palpation skills of veterinary students

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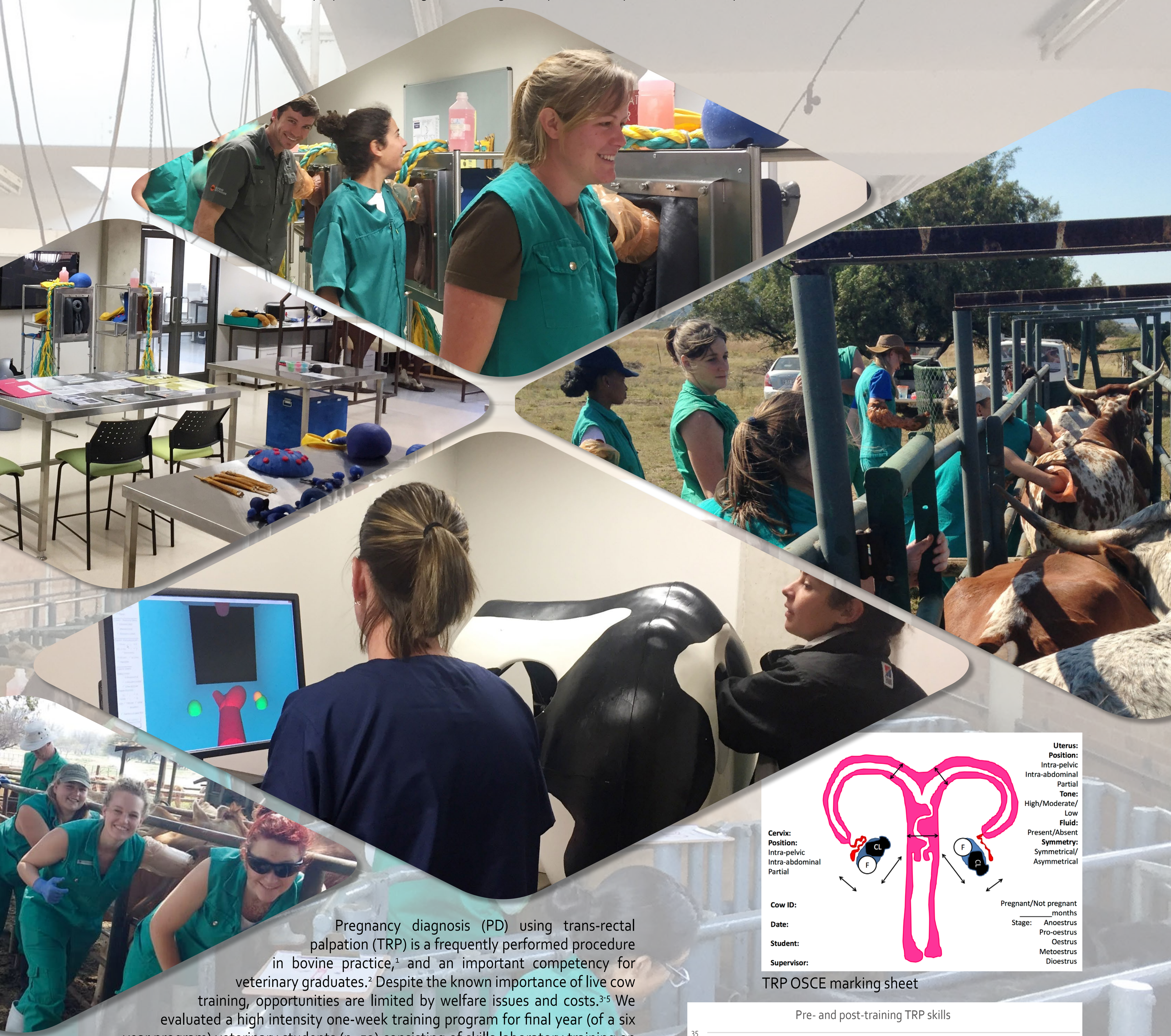

Pregnancy diagnosis (PD) using trans-rectal palpation (TRP) is a frequently performed procedure in bovine practice,[1] and an important competency for veterinary graduates.[2] Despite the known importance of live cow training, opportunities are limited by welfare issues and costs.[3-5] We evaluated a high intensity one-week training program for final year (of a six year program) veterinary students (n=59) consisting of skills laboratory training on Breed'nBetsy[a] and Haptic cow[b] simulators, abattoir organs (uteri and fetuses at different pregnancy stages), various theory materials and live cow PDs supervised by experienced large animal practitioners (mean 159; SD 134 PDs per student). Palpation skills were assessed before and after training using a validated TRP OSCE in non-pregnant cows and were rated as none, deficient, some, good and confident palpation skills (based on a score of 0-1, 2-3, 4-6, 7-9 or 10-11 from a maximum of 11, respectively).[6] Students' scores improved from the first to the second OSCE (mean; SD 6.5; 2.0 and 8.4; 1.9 respectively, $P < 0.01$), mostly as a result of improved abilities to indicate the symmetry (or asymmetry) of the uterine horns and the presence (or absence) of a corpus luteum on the right ovary ($P < 0.01$ and $P = 0.01$, respectively). OSCE scores improved for 7/7, 16/19 and 19/30 students with deficient, some and good initial TRP skills respectively (Figure 1).

It is concluded that a high intensity TRP training program can significantly improve TRP skills of final year veterinary students.

TRP OSCE marking sheet

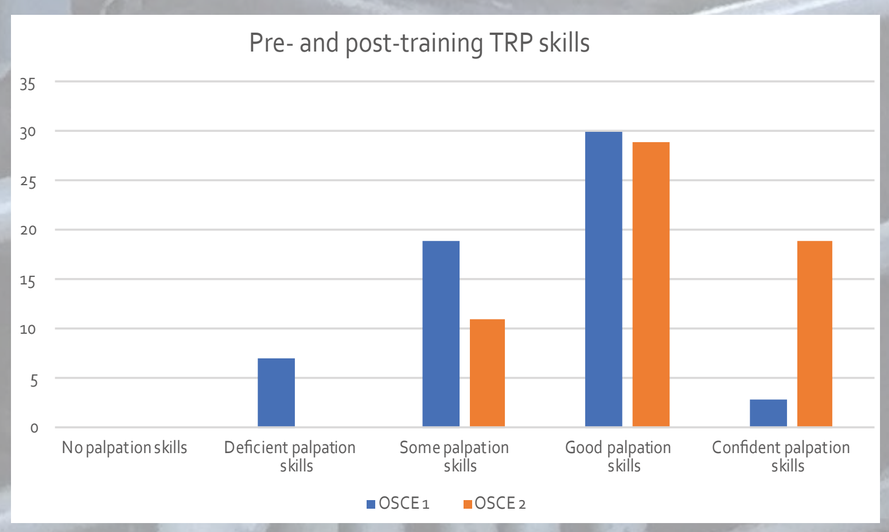

Figure 1

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a Breed'n Betsy, Brad Pickford, Australia, http://www.breednbetsy.com.au/
b Haptic Cow, Virtalis Ltd, Cheshire, UK, https://www.virtalis.com/haptic-cow/

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