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

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References


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 and Haptic cow 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.

Figure 1

TRP OSCE marking sheet

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