Development of a low cost cow dystocia model

Handling of bovine dystocia cases is a day one competency for veterinary graduates. For training purposes, obstetrical manipulations can be performed on abattoir or model calves. These procedures are usually done on tables where students can see which malpresentation, -position or -posture is present. It is however desirable to have students perform obstetrical manipulations blindly.

An obstetrical examination leading to a diagnosis and management plan of the existing dystocia, as well as placing of ropes and other equipment while one cannot see the calf in the birth canal can be challenging.

Hands-on training opportunities for undergraduate veterinary students are limited and not every final year student has sufficient opportunity to perform the procedures.

There are cow dystocia models commercially available but these are costly. Therefore an attempt was made to produce a low cost cow dystocia model that can be used with a dystocia calf model (Veterinary Simulator Industries, Canada). An existing steel frame was modified into a Holstein Friesian cow dystocia model.

A removable dragon skin perineum was designed and a canvas uterus was made to certain specifications by a tent manufacturer. The canvas uterus has a full length zip lock on the dorsal surface for easy access and cleaning and can be removed from the steel frame. The birth canal was simulated by a narrowing with a 50 cm diameter within the steel frame. A large plastic garden refuse bin was cut into half, spray painted and attached to the sides of the steel frame using hinges for mobility. A black and white rope tail was attached to finish off the “Holstein Friesian look”. This model has proven to be usable and real enough, and to fulfill the main objective of handling a bovine dystocia blindly.