Responses to comments and questions about the documentary

Sue Dyson

Introduction

We are hugely grateful to the many people who had the interest and took the time to post comments about the documentary.

It is important to think about why the documentary was created, what were its aims and how this could be achieved, bearing in mind that the horse world encompasses a huge cross-section of people with different aims and aspirations for their horses.

My aim is to see ethical horsemanship, which means all of us taking a share in responsibility for the welfare of horses, joining a journey, a looking, seeing, thinking and learning process and having an open mind, ready to change when appropriate. The horse world is full of dogma and myth, a lack of practice based on evidence-based horsemanship, and sometimes a lack of empathy and compassion.

I want to promote the responsible use of horses in sport and to minimise the abuse that I have seen across the board from 'happy hackers' to elite riders, recognising that fortunately most riders fundamentally have their horse's well-being as their foremost wish, and many seek professional advice, although that advice is not always appropriate.

The Ridden Horse Pain Ethogram

The Ridden Horse Pain Ethogram (RHpE), which we could alternatively call the Ridden Horse Performance Checklist, was developed to facilitate the identification of pain in ridden horses, to promote early intervention, appropriate investigation and hopefully by suitable treatment and management (including removal of inciting causative factors) early and long-term resolution of the problem. It was developed because it was absolutely clear that riders, trainers and some veterinarians were poor at recognising that lameness or pain-related abnormalities of canter were often the cause of underlying sub-optimal performance. Studies from several countries had shown that even horses with obvious lameness were being missed.

The mission of the documentary

The aim of the documentary was to raise awareness of the fact that even though a horse was not overtly lame in hand or on the lunge, there could still be one or more sources of musculoskeletal discomfort that compromised ridden performance. Use of the RHpE could help identify that a horse had discomfort that should be investigated further. We aimed to show how a comprehensive clinical assessment, considering the horse, rider, tack triad, combined with the systematic use of nerve blocks could determine the source(s) of pain. Various methods of imaging (e.g., radiography, ultrasonography) could then be used to determine the causes of pain and only then could a treatment and management plan be devised.

We needed to tell a real-life story to convey these messages in an easy-to-understand engaging way, but in a limited time. It is well-known that the time capacity of viewers to engage with an educational film is short. We stretched to 35 minutes. It was impossible to condense all the information gathered about several horse-rider combinations filmed over many days into just 35 minutes.

We had to do radical editing to focus on what we believed to be most important relative to our goals. This was at times an agonising process!

So what got jettisoned?

For each horse-rider combination we acquired an extremely comprehensive history regarding duration of ownership and day to day management (nutrition, feeding practices, turn-out, social interactions, work-programmes, conditioning programmes, competition schedules and performances, footing on which the horses worked, trimming and shoeing, tack-fit checks, interventions from trainers, veterinary investigations and treatments, involvement of other professionals – physiotherapists, chiropractors, osteopaths, dental technicians, how the horse behaved under many different circumstances etc.). This comprised many pages of written notes!

All of this information is crucial for facilitating diagnosis and for developing a long-term management plan. It was beyond the scope of the documentary to consider most of this. In my opinion management requires a team approach to the horse, tack, rider triad, involving a group of professionals who work together. Rest assured that the discussions were much more far ranging than covered in the documentary.

We could not include much of the footage and discussion surrounding many aspects of the preliminary clinical assessment, not because they were not important, but because there was just no space. I fundamentally agree with the 'no foot no horse' concept, but there sadly was no room to include all that we filmed.

Lameness diagnosis and finding an appropriate veterinarian

Several people commented that they had problems with their horse but did not know how to proceed further. The principle behind lameness and poor performance assessment is to determine the source(s) of pain and this usually requires the use of nerve blocks. The training which most veterinarians receive at veterinary school equips them to be a generalist rather than a specialist. This means that the veterinarian closest to you may be excellent in providing day-to day basic care but may not have the knowledge and skills to perform an in-depth lameness assessment, including evaluation of the horse ridden. If you were a human athlete, you would consult a sports medicine specialist, so why not the same for your horse?

What are the causes of musculoskeletal injury in sports horses?

There is no simple answer to this, because the causes are multifactorial. There are a few basic points for which there is evidence-based information:

- 1. Some horses are inherently predisposed to injury, through conformation, movement or structural 'weaknesses' of tendons and ligaments.
- 2. Inappropriate training can predispose to lameness.
- 3. A rider who is not in balance, who sits crookedly, thus creating asymmetrical force distribution, will over-time create adaptations in movement in the horse which may predispose to lameness.
- 4. Ill-fitting tack (for horse and/or rider) is a predisposing factor.
- 5. Inappropriate trimming and shoeing may predispose to lameness.

- 6. The horse is not designed to be sedentary either physically or mentally; regular varied exercise on variable terrain and footing and uncontrolled turnout are important for musculoskeletal health.
- 7. Obesity predisposes to lameness.
- 8. Training should be slowly progressive and varied; repetitive overload predisposes to injury.
- 9. Failure to recognise problems early results in changes in neuromuscular pathways, adaptive changes in gait, alteration in movement patterns and changes in muscle development. The horse tries to minimise discomfort but does so resulting in other secondary problems.
- 10. Mental well-being and willingness to work are also dependent on social interactions; horses are by nature herd animals.
- 11. Athletic sports result in microdamage; adequate recovery time allows repair. Repetitive over-use results in microdamage advancing to more significant tissue damage that may cause pain and alteration in performance and behaviour. Early intervention is key to restoring musculoskeletal health.

High-level sports, different sports disciplines, and low-level competition

It has been shown that RHpE scores are higher at lower levels of competition compared with elite sports horses. This is associated with a higher frequency of occurrence of frank lameness or abnormalities of canter in lower-level competition horses. This probably reflects lack of recognition of these problems.

The frequency of occurrence of some specific injuries is influenced by the sport in which a horse competes at high levels, but not at lower levels.

The spectrum of injuries is changing for a variety of reasons. For example, the proportion of general-purpose riding horses with hindlimb lameness associated with proximal suspensory desmopathy has gone up in recent years, probably related to more and more riders riding in arenas, rather than over more varied surfaces and terrains.

Is there a ridden horse pain scale?

The RHpE (or Ridden Horse Performance Checklist) does not determine the degree of discomfort a horse is experiencing. It is a tool to determine the likelihood of a horse experiencing musculoskeletal pain. It is important to recognise that although there may be a variety of reasons for each of the 24 behaviours, in the context of the RHpE it is the total number of behaviours which is the crux. The total score will be influenced by an individual horse's pain threshold and response to pain, and type and intensity of work.

There is no current method for subjectively or objectively determining the level of discomfort experienced by a ridden horse. Objective gait analysis, for example the 'Lameness locator', can indicate the degree of asymmetry a horse shows, but this can be misleading in a horse with lameness in more than one limb, which commonly occurs.

The tack

Tack fit for horse and rider is of paramount importance but is often overlooked. As in most professions there are excellent tack fitters and less-skilled people. It is important to seek advice,

but riders should learn the simple basics so that they can determine whether the advice that they have been given is appropriate.

Horses vary hugely in the shape and size of their heads and mouths; the external features of the head do not correlate with the dimensions of the mouth and tongue. One size does not fit all.

Abnormal behaviour during tacking-up and mounting may reflect an ill-fitting saddle but could also be in anticipation of pain during ridden exercise.

There is currently limited scientifically based knowledge on individual horse's reactions to different bit and noseband types, but it is common-sense that an ill-fitting bridle could cause pain, as could mouth injuries induced by sharp teeth, an inappropriate bit or bad riding.

We need to be asking why people use the equipment that they do.

Polysaccharide storage myopathy (PSSM)

Polysaccharide storage myopathy has two forms, types 1 and 2. Type 1 is associated with a mutation in the glycogen synthase 1 gene. The cause of type 2 is unknown but is more common. Diagnosis is based on clinical signs, which often mimic tying up, and the presence of specific features in a muscle biopsy. The clinical signs showed by Galina would not be typical of PSSM; she showed overt lameness which was improved by nerve blocks.

Every horse is not designed to be an athlete

These are very true words, but with appropriate training, fitness and management, most horses are capable of basic flat work and low-level jumping.

Is it wrong to use phenylbutazone ('bute') to mask pain?

If you had a headache, would you take paracetamol or aspirin to relieve the pain? Many low-grade, chronic (long-standing) causes of pain in horses are not necessarily progressive and are not at risk of being markedly exacerbated by regular exercise, provided that the exercise is not excessive. Ideally it would be good to have a diagnosis to be sure that the cause of pain was known. In my experience many horses' working lives can be extended comfortably by the judicious provision of pain relief.

What is meant by 'routine medication' and can it be justified?

The term routine medication' has been coined to describe the regular injection of a variety of joints with a range of products, encompassing corticosteroids, hyaluronan, mesenchymal stem cells, platelet rich plasma and others. This is not necessarily done based on a diagnosis of joint pain, nor is there any evidence that it can prevent joint problems occurring.

My personal philosophy is that there is no indication to treat a non-lame horse. If a horse is lame, I want to determine the cause so that I can give targeted treatment, and to address any predisposing factors.

If osteoarthritis was identified in a joint I would advise treatment of that joint on a regular basis, the interval between treatments being determined by the individual horse. The aim would be to treat the horse before lameness recurred.

The participants in the documentary

I think that anyone who is prepared to partake in a documentary film which we hoped would have global distribution is brave and that bravery should be acknowledged. We are all sitting targets for criticism. I am hugely grateful to all who took part. Lauren is an articulate, caring, compassionate, truthful individual who had done her best to have correct guidance and still wanted more answers. She was open and emotional and clearly wanted the best for her horse.

We all have different goals for what we want to achieve with horses. We all have our own thoughts about what we think is acceptable to ask horses to do. I think we should respect those differences.

Know what is normal

We must also remember what a comfortable athlete looks like.



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