

An investigation into horse owner/loaner knowledge on equine sleep and non-syncopal collapse.

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INTRODUCTION:

Sleep plays a vital role in the welfare of all animals. Horses sleep for between 3-4 hours and require 25-40 minutes of REM sleep in a 24-hour period, for which they must be recumbent (Greening and McBride, 2022). Non-syncopal collapse has been associated with horses that cannot achieve a recumbent posture, such that REM sleep occurs whilst standing up (Haines, 2022). Due to muscle atonia associated with this sleep state, the horse then partially or fully collapses. The study's aims were to determine overall understanding of equine sleep, and also to record owner experiences of equine non-syncopal collapse.

METHOD: An online questionnaire was placed on a variety of equestrian Facebook groups. Out of 75 responses, 15 (20%) had experienced spontaneous collapse with their horse. Open questions were used to capture owner experience of collapse. Answers were subject to thematic analysis. Closed questions enabled statistical analysis. Participants were grouped into Group 1 = horses require ≥ 5 hr of sleep and Group 2 = horses require ≤ 4 hr sleep. Mann Whitney U ($P < 0.05$) was used to determine differences between these two groups relative to how likely they were to consider lack of sleep as a reason for lack of energy.

RESULTS: Overall, 41% of participants believed horses slept less than 4 hours and 59% believed they slept more than 5 hours (Figure 1).

Group 2 were significantly more likely to consider lack of sleep as a reason for lack of energy than Group 1 (add Mann Whitney U Text result and P value here).

Three key themes for management of collapse were determined 1) environmental changes, 2) short-term changes, 3) medical treatment (Figure 2).

A third of respondents who experienced collapse received veterinary advice that involved prescription of phenylbutazone (Figure 3)

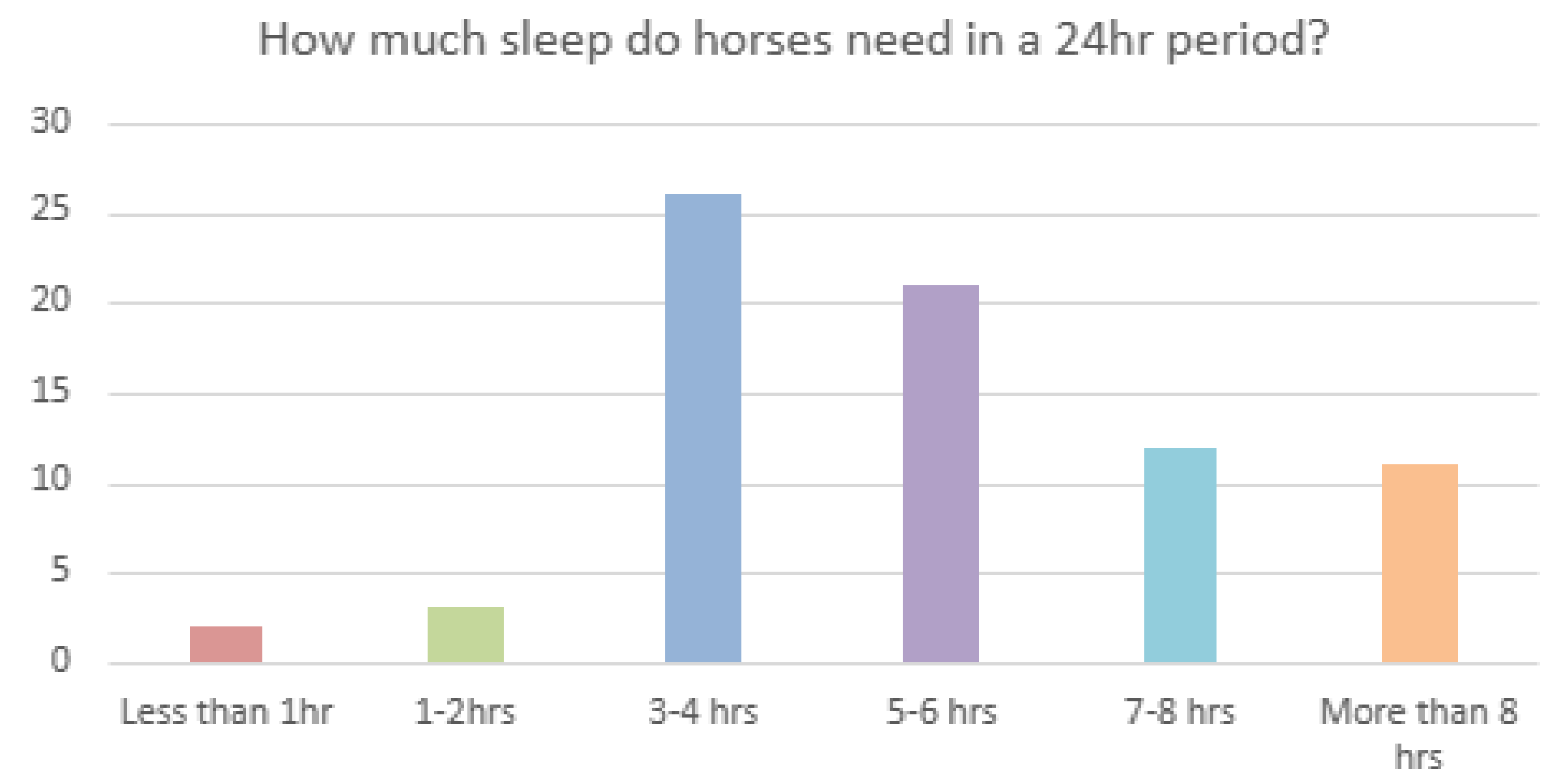


Figure 1: Participants were asked how much sleep they think horses need in a 24hr period.

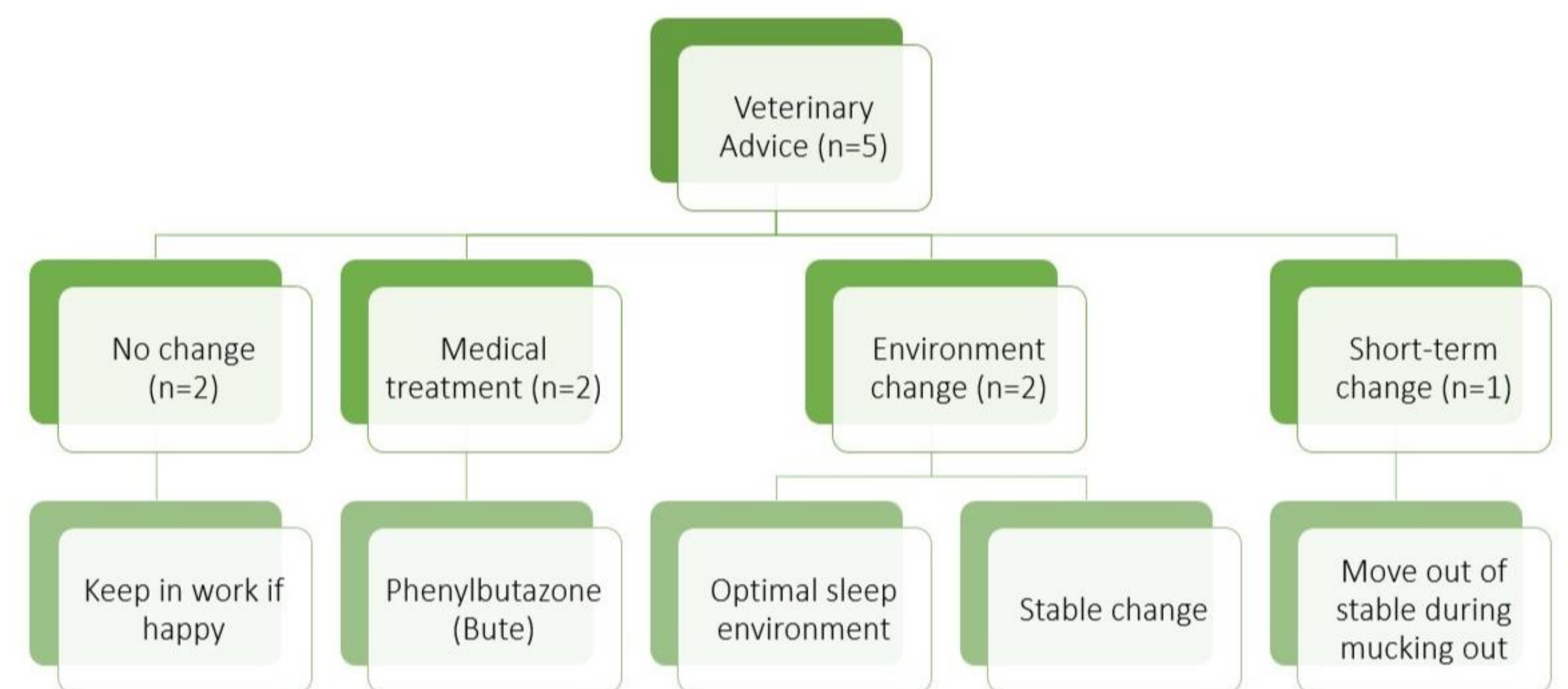


Figure 2: The different approaches participants had to manage their horse with collapse.

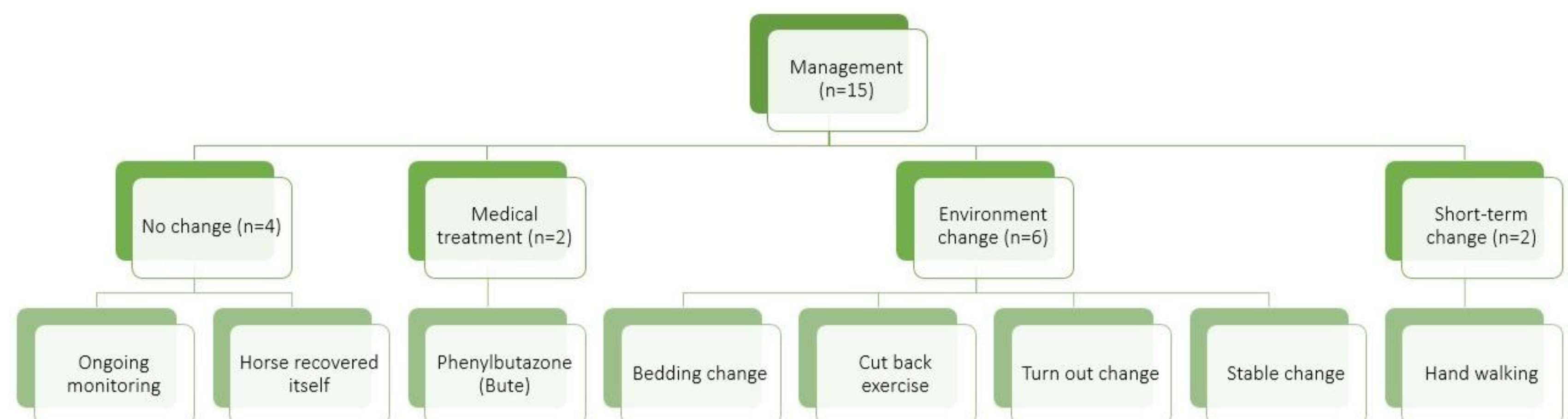


Figure 3: Different veterinary advice themes offered to participants.

DISCUSSION & CONCLUSIONS:

Over half of respondents believed that horses slept for longer than all evidence currently suggests (Greening and McBride, 2022), indicating an element of anthropomorphism. This can happen where a lack of accessible information is available to guide judgements and decisions. Making inferences about the unknown by connecting new, unfamiliar experiences or observations with known and familiar concepts is a common way in which humans make sense of the world (Burnett, 2024). Thus, Group 2 may have been more likely to consider lack of sleep as a reason for lack of energy as they may have a greater knowledge and thus awareness of equine sleep and the consequences of sleep disruption.

In general there is a real lack of information and guidance available to horse owners with horses displaying collapse behaviour. The results of this study did not determine whether management changes were successful in alleviating collapse. Further research needs to be done to determine the efficiency of the current management practises for non-syncopal collapse, including research into veterinary understanding of the disorder.

REFERENCES: Burnett, M. (2024) Rethinking Anthropomorphism. <https://www.aza.org/connect-stories/stories/rethinking-anthropomorphism>; Greening, L and McBride, S. (2022) 'A Review of Equine Sleep: Implications for Equine Welfare', *Frontiers in Veterinary Science*, 9. Available at: <https://doi.org/10.3389/fvets.2022.916737>; Haines, A. (2022) *Sleep Deprivation in Horses*. Available at: <https://www.veterinary-practice.com/article/sleep-deprivation-in-horses>;