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The use of alternative therapies in racing thoroughbreds

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ABSTRACT

The use of alternative therapies (physiotherapy, chiropractic, etc) in the New Zealand (NZ) Thoroughbred appears to be common practice, despite the lack of scientific evidence to support their use in the species. It is unknown what treatments are being offered to these athletes, the types of problems alternative therapies are used for, if the 'therapists' providing the treatments are qualified, and if the horses seen by therapists are also under veterinary care.

To obtain preliminary data on the use of alternative therapies in the NZ Thoroughbred horse a face to face survey was conducted with 23 trainers located in the Auckland and Manawatu regions of the North Island of NZ. The data collected represented 906 racehorses in training during the 2004/2005 racing season. Stables were categorized as small (less than 10 horses, n=8), medium (11-25 horses, n=8) and large (greater than 26 horses in training, n=7). The proportion of horses injured within each stable category was 21%, 28% and 33% respectively.

Nineteen trainers out of the 23 surveyed used at least one type of alternative therapy during the racing season, and 296 horses (33%) had at least one exposure to alternative therapy. On average trainers spent \$25,026 per year on veterinary treatments and \$43,112 on alternative therapies. Eleven different types of alternative therapy were identified by trainers, with physiotherapy being the most commonly used (10 trainers), particularly by large (71%) and small (63%) stables. Eight stables used some form of alternative therapy on a monthly basis to treat 33% of their horses in training, 4 on a weekly basis to treat 47% of their horses and 3 on a daily basis to treat 44% of their horses. Sixteen different alternative therapists were identified in this study, 7 had formal qualifications. The data collected indicated that the use of alternative therapies in the NZ Thoroughbred industry was widespread.

Keywords: Horse; Thoroughbred; alternative therapy; chiropractic; physiotherapy.

INTRODUCTION

There has been a growing interest in the use of complementary and alternative veterinary medicine treatment (CAVM) options as an integral part of equine rehabilitation. CAVM is defined by the American Veterinary Medical Association (AVMA) as "a heterogeneous group of preventative, diagnostic, and therapeutic philosophies and practices" that includes but is not limited to: "aromatherapy; Bach flower remedy therapy; energy therapy; low energy photon therapy; magnetic field therapy; orthomolecular therapy; veterinary acupuncture, acutherapy, and acupressure; veterinary homeopathy; veterinary manual or manipulative therapy (similar to osteopathy, chiropractic, or physical medicine and therapy); veterinary nutraceutical therapy; and veterinary phytotherapy" (AVMA 2001). CAVM may be utilized by those that have been discouraged with conventional veterinary treatment (Pascoe, 2002).

Whilst the physical rehabilitation of injured athletes is an integral part of human sports

medicine, the veterinarian has been slow to embrace these unproven therapies. It is thought that many veterinarians are opposed to alternative therapies because the definition of "alternative therapies" tends to put all unproven therapies into one group (Jones 2004). This means that therapies that are perceived to offer some good are stereotyped with those considered totally ineffective. If an animal is in pain, prescribing an unproven treatment in lieu of a proven effective treatment runs the risk of causing further suffering (Ramey and Rollin 2001). Anecdotal evidence suggests that alternative therapies such as acupuncture and chiropractic may be effective, but at present there is no scientific evidence to support these claims (Jones 2004).

There is little documented information on the use of such treatments applied within the NZ Thoroughbred racing industry. This study reports on a survey to investigate the use of alternative therapies in NZ racehorses, in particular the type of alternative therapies currently in use in NZ, the types of problems alternative therapy is used for, if qualified practitioners are administering these

treatments, and the veterinary involvement with alternative therapies.

This study attempts to provide preliminary data on the use of alternative therapy within the NZ Thoroughbred racing industry.

MATERIALS AND METHODS

Pilot data obtained from a phone survey of 15 randomly selected Thoroughbred racehorse trainers in the North Island indicated that approximately 40% of racehorses were exposed to some form of alternative treatment. The estimated sample size to determine the true prevalence of alternative health treatments was estimated to be 369 horses (Thrusfield 1997).

Thoroughbred racehorse trainers located in the Manawatu and Auckland regions of the North Island were chosen as the sample group. These two areas had a high concentration of Thoroughbred racehorse trainers – in the Auckland region 15% of total NZ trainer population and in the Manawatu region, 19% of NZ total trainer population (NZ Racing Board, 2004).

Trainers were selected from a list of Thoroughbred trainers provided by New Zealand Thoroughbred Racing (Inc). The trainers were contacted initially by phone and provided with a brief synopsis of the study. If willing to participate the trainers were interviewed at their training premises with a questionnaire containing closed and open ended questions. The questionnaire was structured to provide data on the stable size, use of alternative therapies and the frequency of use.

The data were tabulated and edited using MS Excel 2003 (Microsoft Corporation, USA). The effect of stable size on expenditure was examined using a general linear model in SPSS v12.1 (SPSS Chicago, IL, USA) with a significance level of $P < 0.05$. Data are presented as means \pm standard errors, unless otherwise stated.

RESULTS

Data were collected on 906 horses that were in training with 23 trainers from Auckland (40% of horses, 11 stables) and the Manawatu regions (60% of horses, 12 stables).

More horses were from large (stables with more than 25 horses in training, $n=495$ horses, $n=7$ trainers), than medium (stables with 11 to 25 horses in training, $n=276$ horses, $n=8$ trainers), or small sized stables (stables with less than 10 horses

in training, $n=135$ horses, $n=8$ trainers). Most horses in the stables were 2 and 3 year olds, typical of horses in training with licensed trainers in NZ.

The use of alternative therapy as a treatment option was common. Nineteen trainers used some form of alternative therapy during the 2004/2005 racing season. The remaining four trainers that did not use alternative therapy for a variety of reasons, including no immediate services in their vicinity, low success rate and lack of support from their veterinarian regarding the therapy use.

Sixteen trainers said that veterinarians did not work in conjunction with their alternative therapist/s for several reasons including that the veterinarians remained skeptical of alternative therapies.

Physiotherapy was the most common form of alternative therapy with 10 trainers using physiotherapy at least once during the racing season (August 1 – July 31). Massage and chiropractic treatment were the next most popular forms of alternative therapy (eight trainers for each therapy type). Seven trainers used magnetic boots, laser treatment was utilised by six trainers and ultrasound was used by four trainers, often as a follow-up to an earlier physiotherapy session. Homeopathic remedies had been tried by three trainers whilst acupuncture, Bowen therapy, magnet therapy and the use of a bioptron light had also been used during the racing season (one trainer for each type of therapy).

The trainers surveyed spent \$25,026 (SE \$8,547) on veterinary treatments for their horses in training. In comparison, the mean amount spent by trainers on alternative therapy was significantly higher at \$43,112 (SE \$22,051, $P < 0.05$), which was higher than the trainers initial estimate provided for 40% of trainers surveyed. For most stables surveyed there was little variation in annual expenditure on veterinary care and alternative therapy with the exception of for stable 7, which spent \$469,440 on alternative therapy during the 2004/2005 season, in comparison to the \$12,000 spent on veterinary treatment that season.

Large and small sized stables spent significantly more on veterinary care per horse than medium sized stables. Large stables spent significantly more on alternative therapies than small or medium stables (Table 1). Medium stables had a higher incidence of back problems (14%) in comparison to 9% and 5% for small and large stables respectively.

TABLE 1: Descriptive data ($\mu \pm SE$) of the total and mean annual expenditure (\$NZ) on alternative therapy and veterinary treatment according to stable size.

	Stable size		
	Small	Medium	Large
No. of horses in stable category	135	276	495
\$NZ spent on veterinary treatments annually per stable	10738 \pm 2472	6388 \pm 2201	62657 \pm 22902
Total amount (\$NZ) spent on veterinary treatments per horse	845.64 \pm 296.35 ^a	182.45 \pm 54.49 ^b	857.93 \pm 267.58 ^a
\$NZ spent on alternative therapy annually per stable	130282 \pm 63487	3333 \pm 1123	6620 \pm 1819
Total amount (\$NZ) spent on alternative therapy per horse	490.42 \pm 150.30 ^a	94.71 \pm 32.06 ^a	1861.11 \pm 972.39 ^b

Different superscripts in same row are significantly different ($p < 0.05$)

Of the 906 horses in the study, 296 horses received some form of alternative therapy during the 2004/2005 racing season. The greatest number of sessions (number of horses x frequency of use x yearly horse sessions) for any treatment was physiotherapy (142 horses, 13032 sessions), followed by massage (69 horses, 6792 sessions), magnetic boots (50 horses, 6044 sessions), magnetic field therapy (15 horses, 5460 sessions); laser treatment (30 horses, 2444 sessions) and ultrasound (21 horses, 2308 sessions). Forty-one horses were given homeopathic remedies during the racing season (1652 treatments) and 66 horses received chiropractic manipulation (680 sessions). Biopteron light (4 horses, 312 sessions) and Bowen therapy and acupuncture (6 horses and 72 sessions each) had the least use.

Of the 23 stables, 7 used an alternative therapy on a horse in training at least weekly. Eight stables used some form of alternative therapy on their horses in training once a month and 4 stables never used alternative therapy (Table 2).

TABLE 2: Descriptive data showing how often horses are treated with alternative treatment means during the 2004/2005 racing season.

Frequency of alternative therapy use	Number of stables (n)	Percentage of horses in stable that were treated with alternative therapy ($\mu \pm SE$)
Never	4	0 \pm 0
Daily	3	44 \pm 2
Weekly	4	47 \pm 1
Fortnightly	3	36 \pm 6
Monthly	8	33 \pm 6
3 Monthly	1	8 \pm 0

It is unknown how many equine alternative therapy practitioners are practicing within the racing industry. Sixteen different therapists were

mentioned by the 23 trainers. Seven of these therapists had formal qualifications or a certificate. Only two trainers indicated they were requiring therapists to have formal qualifications. The physiotherapy and chiropractic modalities had 4 and 6 therapists, respectively. Three massage therapists were used whilst the laser, homeopathy and Bowen therapy modalities had one practitioner each.

DISCUSSION

Alternative therapy use among trainers surveyed was common. Eighty three percent of trainers used some form of alternative treatment on 33% of their horses throughout the racing season of 2004/2005. Eleven different modalities of alternative therapy were identified. Physiotherapy was used primarily by large and small stables whilst medium stables preferred to use chiropractic treatment. Physiotherapy was cited by trainers as being more 'hands on' and therefore 'proactive' approach to treating the injury, permitting the horse to return to training at a faster rate. Small stables in particular can not afford to lose too much training time so require horses to recover from injuries quickly. Medium stables may choose to use chiropractic therapy in response to the higher incidence back problems (14%) in comparison to 9% and 5% for small and large stables respectively.

Small stables used ten types of alternative therapy throughout the season; large stables used eight whilst medium stables only utilized four types of alternative therapy. This suggests that trainers from small and large stables were more willing to try alternative means of treatment to get desired results than those from medium sized stables. Medium stables used three of the more commonly known alternative therapies-chiropractic, massage and magnetic boots which may suggest that trainers from these stables may

have a more conservative approach in treating their horses.

Medium sized stables spent considerably less than small and large stables on both veterinary treatment and alternative therapies. A possible explanation could be that the trainers from the medium stables surveyed all performed their own massage therapy on their horses rather than paying a therapist (both in the Manawatu and Auckland). This would account for the lower alternative therapy costs per horse, particularly as massage is one of the more expensive modalities of alternative treatment.

Most stables surveyed spent similar amounts on veterinary treatments and alternative therapies. However, stable 7 spent a substantial amount on alternative therapies this season - \$469,440 in comparison to a low veterinary expenditure of \$12,000. This trainer had a successful season, with 241 starts and a total of \$210,290 won by the stable (NZ Racing Board, 2004). This may account for the large expenditure on alternative therapies, indicating that the trainer had seen benefits from the use of alternative therapies, so was willing to use them at the expense of veterinary treatment. The similarity of costs between veterinary treatment and alternative therapies implies that of the trainers surveyed most have seen benefits from one or more types of alternative therapy and were willing to spend money on these therapies as well as on the more conventional veterinary treatments. It is interesting to note however that during the survey trainers were asked to estimate how much they spent on alternative therapies during the season and 40% of trainers underestimated their costs, mainly due to the fact that invoices are sent directly to horse owners, so trainers do not see the actual costs.

A number of reasons were provided by trainers as to what led them to trying alternative therapy on their horses. Seven trainers identified that they had a prior acquaintance with an alternative therapist which had influenced their decision towards alternative therapy use in horses. Eight trainers acknowledged that their decision to utilize alternative therapy had arisen from talking to other trainers or word of mouth at racing meets or events. It could be speculated that trainers are influenced by verbal appraisal of alternative therapies, rather than media/written sources and are therefore more likely to try something different if other trainers have seen benefits. Trainers stated that they felt that alternative therapies were more specific i.e. focused on a number of factors that could be contributing to the injury or problem and

it was thought that this mindset may have been an overriding factor in these perceived benefits.

Studies by Haussler (1997, 1999, and 2003) have commented on individuals claiming to be 'equine alternative therapy practitioners' but lack formal training or licensing in the required areas. Results of this study reported that 16 different therapists were mentioned by trainers. Out of these 16 therapists, 7 (44%) had formal qualifications or a certificate in equine alternative therapy. However, the study also identified that only 2 trainers were concerned about qualifications. In the United States most alternative human therapists, such as chiropractors and acupuncturists, are restricted by law from practicing on animals, because many state acupuncture and chiropractic acts refer specifically to humans (Ramey and Rollin, 2004). This is applicable to veterinarians also. For example, in the state of Ohio, it is not permissible for a veterinarian to advertise using the term chiropractic care, animal chiropractor, or chiropractic unless he or she is a licensed doctor of chiropractic (Ramey and Rollin, 2004). This distinction is also noted in the 2001 AVMA guidelines (AVMA, 2001). Certification in various CAVM modalities is also available in the United States, although a veterinary degree may or may not be required to obtain it (Ramey and Rollin, 2004). In the 2001 guidelines, the AVMA states 'The AVMA does not officially recognize diplomate status or certificates other than those awarded by veterinary specialty organizations that are members of the AVMA American Board of Veterinary Specialties (ABVS), nor has it evaluated the training or education programs of other entities that provide such certificates' (AVMA, 2001). In NZ, the Veterinary Council of NZ (VCNZ) publishes a code of professional conduct for veterinarians which states 'Alternative or complementary therapies do not usually have the weight of scientific proof of their efficacy and therefore the use of these products and/or services must be considered as a discretionary use. A veterinarian using an alternative or complementary therapy must do so in accordance with the NZVA Code of Practice for the Discretionary Use of Human and Veterinary Medicines by Registered Veterinarians' (VCNZ, 2004). The NZ Ministerial Advisory Committee on Complementary and Alternative Health (MACCAH) states that currently, there is no specific legislation to regulate CAM practitioners, with the exception of chiropractors who are regulated by the Chiropractors Act 1982 (MACCAH, 2005).

CONCLUSION

The work undertaken in this study highlights that the use of alternative therapy in racing Thoroughbreds in NZ is common place. This study has shown that 33% of horses receive alternative therapy and that 36% of horses treated with alternative therapy were exposed at least every two weeks. Sixteen therapists were used within the two regions surveyed and 43% of these therapists had a formal qualification or certificate (more than seven days training) allowing them to administer alternative therapies to animal species. Trainers are spending on average \$18,000 more on alternative therapies than veterinary treatment each year. Studies to investigate the effects of alternative therapies on horses are warranted.

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