Author's response to reviews

Title: Unknotting night-time muscle cramp: a survey of patient experience, help-seeking behaviour and perceived treatment effectiveness

Authors:

Fiona E Blyton (Fiona.Blyton@newcastle.edu.au)
Vivienne Chuter (vivienne.chuter@newcastle.edu.au)
Joshua Burns (joshua.burns@health.nsw.gov.au)

Version: 3 Date: 29 February 2012

Author's response to reviews: see over
Tuesday 28 February 2012

Professor Hylton Menz
Editor, Journal of Foot and Ankle Research

Dear Professor Menz,

Thank you for considering our manuscript ‘Unknotting night-time muscle cramp: a survey of patient experience, help-seeking behaviour and perceived treatment effectiveness’ for publication in the Journal of Foot and Ankle Research. As no further comments were made by reviewer 2, this letter addresses comments from reviewer 1 only. We have addressed the reviewer’s comments as listed below and have highlighted in yellow new text in the manuscript.

Major Compulsory Revisions:

1. The authors state in the beginning of the discussion section that most participants were experiencing some help from treatment and that the frequency and severity of cramp could be higher if current treatment were withdrawn. I concur with this statement. However, I believe such an acknowledgment poses as a significant limitation of the current study and casts doubt on the accuracy of their data (e.g., pain, soreness, etc). As a result, these data do not describe the experience of people with nocturnal cramping per se, but rather the experiences of those who cramp and self-medicate.

Authors’ response: We recruited people regardless of their therapeutic regime in order to obtain a cross-section of the community who experience night-time calf muscle cramps. It would have been impossible to recruit such a large number of participants if we excluded all those who cramp and self-medicate, and the results would not have been generalisable to the vast majority of cramp sufferers who try several interventions to alleviate their pain – albeit to no avail.

We state in the methods section that ‘No exclusions were made based on medication use or current treatment of cramps.’ We hope that this gives readers fair warning that symptoms reported by participants are despite current therapies. We have also added to the beginning of the treatment paragraph in the results section the statement ‘All participants had tried to treat their night-time calf muscle cramps’ (p9). This limitation is also conceded in the discussion section.

2. I find myself asking the question “Why?” still as I read much of the discussion section. In fact, much of the discussion section reads like the results section. There is little explanation or speculation on the importance of these data or how these data shed light on the cramp problem. For example, the authors discuss the age to first cramp on p13 yet offer minimal explanation for why cramps occurred earlier in this sample as opposed
to others in the literature. Could there be a pathophysiological explanation for this finding?

Authors’ response: We have revised the discussion section to highlight the implications of the findings. We have added a discussion of the placebo effect: ‘For all interventions reported in the present study, it is not possible to disentangle any placebo effect from true intervention effects. It is possible that the placebo effect accounts for some, if not all, of the perceived effectiveness of some interventions’ (p14).

We have also commented more clearly on the ineffectiveness of interventions used: ‘Despite the present finding of more common advice seeking, only two participants reported achieving cramp prevention with treatments recommended. Both reports related to quinine, which doctors in Australia are now discouraged from prescribing for muscle cramps’ (p13).

We have cautiously elaborated on the discussion of age of cramp onset. The sentence now reads: ‘The younger age of cramp onset in the our sample might reflect the inclusion of adults of all ages or differences in exposure to cramp precipitants (e.g. climate) between the UK and Australia’ (p13).

Previous peer review comments directed us to provide a fuller overview of the results in the discussion. For this reason, we have not removed any results from the discussion, but we are happy to do so upon the Editor’s request.

Minor Essential Revisions:

1. Please describe what the book ends of the visual analog scale were for pain intensity (0 mm = ?, 100 mm = ?). I’m assuming that 100 meant “worst pain” but this should be clarified.

Authors’ response: Scale anchors are defined in the second paragraph of the methods section: ‘usual pain severity of cramp (rated on a 100 mm visual analogue scale where 0=no pain and 100=worst pain imaginable)’. We are happy to also include scale anchors in the results section upon request.

2. I do not find the calculation of CI’s for mean differences helpful. If CI’s are going to be reported, report them for the actual data rather than a calculation. I believe this makes it much easier for the reader to understand.

Authors’ response: We have updated all 95% confidence intervals (CI) so that the difference in means is presented before the 95% CI, e.g. 63mm vs. 69mm; mean difference -6 mm; 95%CI: -15 to 2; t_{77}=-1.43; p=0.16. This style of presentation is used by the Cochrane Collaboration when comparing mean scores between groups. We have attached our group’s Cochrane review of custom made foot orthoses for foot pain. 95%CI are best viewed in the tree/forest plots starting on page 57 (pg 61 when opened in Adobe). If the Editor agrees with the reviewer that our reporting of 95%CI should be
changed, we ask the reviewer to please provide an example of how he would prefer the data presented.

3. What is meant by “irregular times” (p8)?

Authors’ response: In the survey, participants were asked to recall when they usually experienced muscle cramp. They were given the options: (1) before I first fall asleep; (2) within two hours of first falling asleep; (3) during the middle of my sleeping time; (4) within the 2 hours before I would usually rise in the morning; (5) irregular; (6) not sure.

In the results, we state ‘Cramps were mostly reported to occur at irregular times (n=32, 40%), during the middle of sleeping time (n=24, 30%), within two hours of rising in the morning (n=10, 12.5%), before falling asleep (n=6, 7.5%) and within two hours of first falling asleep (n=6, 7.5%).’

We have modified the wording to ‘irregular times throughout the night’ in the hope that this improves clarity.

Discretionary Revisions:

1. Remove “Source of advice” in the top of Table 2 as the title accurately reflects the information given as rows.

Authors’ response: We have removed ‘Source of advice’ from row 1 of the table.

Yours sincerely,

Fiona Blyton (nee Hawke), B App Sc (Pod) Hons

Vivienne Chuter, PhD

Joshua Burns, PhD