



Reply to Wang and Chen



We were delighted to read the letter by Dr. Wang and Dr. Chan (Wang and Chan, 2019). They raised insightful questions on our recent randomized controlled trial of electroacupuncture for benzodiazepine tapering (Yeung et al., 2019). We would like to take this opportunity to reply to the authors.

Dr. Wang and Dr. Chan raised a concern about whether the participants were truly blinded because the physical appearance of the acupuncture needles in the treatment group was not exactly the same as that of the Streitberger needles in the control group. Administering a placebo is always a challenge in trials of complex interventions like those involving acupuncture. We admit that the design of our placebo might not have been ideal, as the needles that were used there were not completely identical with those that we used on the treatment group. The procedure used on the treatment group was designed to simulate the usual clinical practice; therefore, we chose a more commonly used band in local clinics to enhance the generalizability of the study. To facilitate the blinding procedure, during the intervention the participants were treated separately and were not aware of what procedure the other was receiving. In addition, we had tested the success of the blinding. At the end of the intervention, we asked the participants to guess which treatment they had been receiving, to examine the success of the blinding (Yeung et al., 2019). There was no significant between-group difference in the proportion of subjects who guessed that they had received the “real electroacupuncture treatment” (Electroacupuncture group vs. Placebo acupuncture group: 40.3% vs. 47.2%, $P = 0.40$) or had “no idea” which treatment they had received (Electroacupuncture group vs. Placebo acupuncture group: 20.8% vs. 20.8%, $P = 1.00$), indicating that the blinding was successful. In addition, our results demonstrated that both groups had a similar benzodiazepine cessation rate; hence, the effect observed in the treatment group is unlikely to have been inflated by performance bias due to unsuccessful blinding.

Dr. Wang and Dr. Chan pointed out that in the original set-up of Streitberger needles which contain a plastic o-ring covered with a plaster that is not suitable for use on the head, which is hairy, and that it may be not reasonable to include so many acupoints on the head. However, the trial participants were chronic benzodiazepine users who were taking the drugs usually because of mood and/or sleep problems; and many of the acupoints indicated for these problems are located on the head. Our previous systematic review found that some commonly used acupoints for insomnia are located on the head, such as Baihui (GV20), Anmian (EX-HN22), and Sishencong (EX-HN1) (Yeung et al., 2012). A recent systematic review of acupuncture for anxiety also found that EX-HN3 (Yintang), which is at the midpoint between the medial ends of the eyebrows, is a commonly used acupoint for anxiety (Amorim et al., 2018). To not include these acupoints would be to not truly reflect the clinical practice, which would make the effects of the intervention suboptimal. Previous researchers have pointed out that the original Streitberger device, in which the needles are inserted through

the plaster covering the o-ring, is difficult to use. This is because they found that the needles did not always adhere to the skin and that it was not possible to view the insertion of the needles; moreover, the sterility of the needles could also be compromised as the needles penetrate through the plaster (McManus et al., 2007). Therefore, for both groups we have modified the procedure by using surgical tape (or hairpins in hairy regions) to hold the needles in place. This enables the needles to be applied in hairy regions and different needling directions to be attempted. Such an approach has been adopted by our team and other researchers (Chung et al., 2012; Man et al., 2014; Kim et al., 2017; Yeung et al., 2009).

Finally, we completely agree with Dr. Wang's and Dr. Chan's suggestion that different types of benzodiazepine may be associated with different degrees of difficulty in withdrawing from drugs, which may be a confounding factor. We compared the participants' use of benzodiazepine at baseline and found that there was no significant difference between the two groups in the proportion of participants who were using long- or short half-life benzodiazepine (Yeung et al., 2019). We have also further analyzed the data and found no significant difference between the two groups in the use of Z-drugs (Percentage of Z-drugs users in the Electroacupuncture group and Placebo acupuncture group: 65.3% vs. 72.2%, Chi-square test, P -value = 0.37), indicating that the types of benzodiazepine used by the participants in the two groups were comparable. We agree with Dr. Wang's and Dr. Chan's insightful suggestion that more targeted drug inclusion criteria and disease inclusion criteria can be adopted in future trials. We hope that our study and reply will inform and inspire subsequent trials.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jpsychires.2019.02.013>.

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