

## **HRI statement on retraction of Macías-Cortés' et al. 2015**

### **Inexplicable retraction of a rigorous clinical trial showing homeopathy works for depression raises serious concerns over abandonment of the scientific process**

The [Macías-Cortés 2015 study](#) is a gold-standard placebo-controlled trial conducted in a research hospital which found both homeopathy and the anti-depressant fluoxetine to be effective treatments for women with menopausal depression.

On 23 April the *PLOS ONE* Editors took the shocking decision to retract this high quality article from their journal, five years after publication, despite failing to provide any valid reasons for their actions.

As Dr Alexander Tournier, HRI Executive Director explains, “This is a truly disturbing development as it means the usual scientific process itself has collapsed. A small number of individuals have simply thrown the rule book out of the window and decided to wipe a trial from the scientific literature without giving a single legitimate reason”.

The extreme step of retracting a paper is usually only taken for the most [serious breaches](#) of scientific procedure, such as fraudulent results or plagiarism.

By contrast, the Editors have attempted to justify retraction of this study on the basis of strikingly minor or completely unjustified points i.e.:

- 1. Not enough information was given about the precise details of the homeopathic treatment used in the trial.**

Usually any such concerns about ‘insufficient reporting details’ are simply highlighted by other researchers in critiques or (if considered to be particularly important), the author is asked to provide the missing information as a comment or appendix. The medical doctor who led this trial – Dr Emma del Carmen Macías-Cortés – offered this solution to the journal but bizarrely was denied.

- 2. The study design used was insufficient to rule out the possibility that improvement seen in patients given the homeopathic medicines was due to a placebo-effect.**

This is completely unjustified. The design used is *the* most rigorous available in conventional medical research for the express purpose of ruling out placebo effects i.e. a randomised, double-dummy, double-blind, placebo-controlled, three-armed study. To suggest that this is insufficient begs the question, exactly what design would the Editors have considered to be ‘sufficient’?

- 3. Not enough information was provided about how patients were diagnosed, and the Editors question the reliability of those diagnoses.**

Each diagnosis of Major Depressive Disorder (MDD) was made by two independent members of the research team – a medical doctor and a psychologist – using internationally recognised and validated checklists and symptom assessment tools. Questioning the ability of these experienced professionals to be able to make a reliable diagnosis is remarkable.

The Editors have also commented that the fluoxetine treatment given during the trial was inappropriate because it was a fixed dose and only given for 6 weeks. This is incomprehensible. According to a Cochrane review of 171 studies on fluoxetine<sup>1</sup>, 42% of trials used a fixed dose and the most common duration was 6 weeks. The 20 mg daily dose of fluoxetine used in this trial is a typical starting dose used in clinical practice, and as the study found that it worked, clearly it was an appropriate treatment.

Just as the legal system relies on a framework of laws and established precedents to ensure that justice prevails, science has its own framework of rules, procedures and safeguards to ensure scientific integrity and reliability of published work.

Rachel Roberts, HRI Chief Executive adds, “The conventions of the scientific process are designed specifically to prevent what has happened here – a perfectly valid study being removed for spurious reasons, simply because the results are, to some readers, unexpected or controversial.”

Any objective scientist who reads the Editors’ explanatory [retraction notice](#) will see that not one of the alleged weaknesses in the Macías-Cortés 2015 study – even if proved to be genuine, which we strongly dispute – are legitimate grounds for retraction.

For all who believe in the scientific method, even those who are sceptical about homeopathy, this action by PLOS One’s Editors will be judged as a flagrant breach of scientific protocol and nothing less than a threat to academic freedom.

### **Further information**

In this [interview](#), [Dr Macías-Cortés](#) talks about the findings of her study and how she has used homeopathy to help patients struggling with severe-moderate depression and other menopause-related symptoms.

Dr Macías-Cortés’ full presentation on this study at the HRI Malta 2017 conference can also be viewed [here](#).

Contact [info@hri-research.org](mailto:info@hri-research.org).

### **Reference**

1. Magni LR, Purgato M, Gastaldon C, Papola D, Furukawa TA, Cipriani A, Barbui C. (2013) Fluoxetine versus other types of pharmacotherapy for depression. Cochrane Database of Systematic Reviews 7: Art. No.: CD004185. pmid:24353997