

treatment being replicated 4 times in a randomized complete block design. Homeopathic treatments were chosen on the basis of previous experimentation in growth chamber in which they gave significant results in the control of *B. cinerea* infection. They were *Sulphur* 6x, *Horn-equisetum* 6x and *Sulphur* 6x + *Horn-equisetum* 6x, being ultra pure water as a control. These treatments were sprayed weekly according to biodynamic calendar from about the end of March to the mid-June; assessments were performed weekly on fruit production and infection level. At the end of trials, strawberry samples were collected for biochemical analyses. Results showed that some homeopathic treatments induced a decrease of infection level and an increase of both strawberry production and biochemical compounds.

Data obtained from this experimentation need further confirmations by performing field trials in other location and/or by using other crops, but can provide first indications for selecting homeopathic treatments to be proposed for practical use in agriculture, in the context of the so called "agro-homeopathy".

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**Keywords:** homeopathic treatments, strawberry plants, *Botrytis cinerea*, antioxidant activity, polyphenols, flavonoids

## **Depressed patients treated by homeopaths: a protocol for a pragmatic randomized controlled trial and qualitative study applying the cmRCT design**

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**Context:** Depression is a major healthcare problem in Europe and worldwide. The WHO predicts depression will become the main burden of disease worldwide by 2030. Established treatments (antidepressants and the 'talking therapies') may help many depressed patients, but not all. Antidepressants are known to cause unwanted side-effects and many patients refuse to take such drugs. Depression is one of the main reasons why patients seek homeopathic treatment. Existing evidence of the effectiveness of homeopathy in depression is limited and former studies have struggled with difficulties such as low recruitment rates. Qualitative studies reporting on depressed patients' experiences with homeopathic treatment have not previously been published.

**Aims:** To evaluate the acceptability and comparative clinical and cost effectiveness of adjunctive treatment provided by homeopaths for patients with self-reported depression in addition to usual care, as well as patients' experiences with homeopathic treatment.

**Methodology:** We propose to carry out a pragmatic randomised controlled trial using the 'cohort multiple' randomised controlled trials (cmRCT) design. The pragmatic design has been chosen in order to increase external validity. Patients will be recruited from the South Yorkshire Cohort (SYC) which includes some 20 000 participants, of which about 9% suffer from self-reported long-standing depression. By using this methodological approach we hope to facilitate the recruitment process, increase recruitment rates and reduce attrition rates. Patients will be treated by homeopaths over a 9 month period and will be assessed over a period of 12 months. The main outcome measure will be PHQ-9 at 6 months. Secondary outcomes will include PHQ-9 at 12 months, and at 6 and 12 months: GAD-7, EQ-5D, BMI, MYMOP2 and a life satisfaction score. Inclusion/exclusion criteria will be as open as possible, in order for treatment to be as similar to 'real world practice' as possible. We will also be assessing patients' experiences through semi-structured interviews with a purposive sample of participants receiving treatment by a homeopath. We report preliminary data including response rates and, if possible, uptake of intervention rates.