

ORIGINAL RESEARCH ARTICLE

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# Does homeopathic medicine have a preventive effect on respiratory tract infections? A real life observational study

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## Abstract

**Background:** Homeopathic medicine is a branch of integrative medicine that has been gaining increasing popularity. However, its clinical application remains controversial.

To improve the understanding of homeopathy, observational studies-which monitor the effects of homeopathy in real-life clinical settings-are a helpful adjunct to randomized controlled trials.

The goal of this controlled observational study was to investigate the role of the homeopathic medicine in preventing respiratory tract infections (RTIs).

**Methods:** This retrospective analysis of patients' medical records focused on a single centre from 2002 to 2011, and examined 459 patients, out of whom 248 were treated with homeopathic medicine (specific extract of duck liver and heart) and 211 were not treated. All patients were followed-up for at least 1 year, and up to a maximum of 10 years.

**Results:** A significant reduction in the frequency of onset of RTIs was found in both the homeopathic medicine and untreated groups. The reduction in the mean number of RTI episodes during the period of observation vs. the year before inclusion in the study was significantly greater in the homeopathic-treated group than in untreated patients ( $-4.76 \pm 1.45$  vs.  $-3.36 \pm 1.30$ ;  $p = 0.001$ ). The beneficial effect of the homeopathic medicine was not significantly related to gender, age, smoking habits or concomitant respiratory diseases when compared to the effect observed in untreated patients.

**Conclusion:** These results suggest that homeopathic medicine may have a positive effect in preventing RTIs. However, randomized studies are needed before any firm conclusion can be reached.

**Keywords:** Comparative study, Integrative therapies, Homeopathy, Observational study, Oscillococcinum, Respiratory tract infections

## Background

Integrative medicine (IM) refers to all those treatments that are not part of conventional healthcare. Homeopathy is a system of IM that was developed in Europe at the end of the eighteenth century employing medicines prepared according to a well-defined procedure starting from mineral, herbal or animal substances. The techniques for preparing these medicines include the repeated dilution of the raw material in hydro-alcoholic

solutions or in other excipients, and the 'succussion' of the product into different grades [1, 2].

Despite its controversial nature, clinical use of homeopathy has risen steadily in recent years, encouraged by the fact that some of its mechanisms of action have been elucidated and described in randomized controlled trials, meta-analyses or systematic reviews [3–8]. However, other authors have instead negatively evaluated the efficacy of homeopathic medicines, suggesting that they do not yield clinical effects different from placebo [9, 10].

According to the 2012 National Health Interview Survey (NHIS) approximately 5 million adults and 1 million children in the United States used homeopathy in 2011

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