## Comparative analysis for quality control of mother tinctures in Brazilian reports

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**Background:** Quality control of an homeopathic mother tincture begins with the analysis of the raw material. Once the product is obtained, some organoleptic characteristics and Physicochemical properties such as appearance, colour, odour, density, dry residue, alcohol content and chemical marker are evaluated. In Brazil, mother tinctures from different suppliers may have high variability in terms of the specifications described in the homeopathic pharmacopoeia. Objective: The aim of the present study was to compare mother tinctures' quality control from different pharmaceutical suppliers based on Brazilian Homeopathic Pharmacopoeia 3rd edition. **Methods**: Five mother tinctures were selected according to the high number of requests in the pharmacies and, also its monographs are in the Brazilian Homeopathic Pharmacopoeia (FHB) 3rd edition. The report of analysis of the product was provided by three homeopathic pharmacies from the city of Rio de Janeiro. The information in the reports were evaluated and compared to its monograph. Results and discussion: In this study, it was found that the number of laboratories that provide homeopathic pharmaceutical ingredients is rather low. In addition, in some reports, a number of identification tests was not described properly when compared to the monograph. Besides that, some information diverges from the pharmacopoeia, for example, absence of dry residue testing, replacement of the part of the plant used to prepare the mother tincture and results that do not meet pharmacopoeia specifications. As can be seen, the quality and effectiveness of homeopathic medicines prepared from these tinctures may be compromised. Conclusion: In order to guarantee consumer protection and the quality and effectiveness of medicines, governments and regulatory agencies should require greater commitment from suppliers in the production of homeopathic inputs.

**Keywords**: Homeopathic mother tincture; quality control; analysis report.