

# Summary and analysis of Emilie Baudier's thesis by Professor Robert Anton

**Defended on 16 May 2012 at the Free University of Brussels to  
earn her qualification of Masters in Pharmaceutical Studies  
and entitled:**

**"Hospital Applications of Essential Oils  
in Francophone Belgium".**

The first bibliographical section presents an overview of aromatic plants, which are the sources of varied biosyntheses of components which are mostly terpenic and derived from phenylpropane. The techniques for obtaining the oils is described in detail, as are their physical-chemical properties. Aromatherapy in modern times addresses the well-known criteria of quality, controls and toxicity for these natural products.

The second section is experimental: a large-scale study was carried out among 37 Belgian hospitals, with a hundred departments contacted. For this reason, the thesis includes an interesting statistical study with comparison tables showing, in particular, that 26 hospital departments use essential oils (11 in palliative care, 6 in oncology, 6 in maternity and 3 in psychiatry) and 14 would like to use them. One third work with Pharmacies with the goal of providing therapy and well being. More than 90% use essential oils externally only, the rest use them internally (less than 10%). Other statistics are discussed. Staff follow special training that also highlights the precautions to be taken and the potential risks when using these essential oils.

Finally there is close coordination and collaboration between the nursing staff, the doctors and the pharmacists and even between certain departments: palliative care and support at the end of life, hematology/oncology and dialysis, for example. This means that the methods used in the different hospitals and care centres have to be very similar. This applies in particular to the following centres: "Brugmann" hospital, "Le Papyrus" palliative care centre, "Saint Jean" Clinic, "Saint Luc" Hospital, "Mouscron" Centre, etc.

For the Brugmann hospital, two separate clusters have been created. The first is centred on "quality of life units" led by nurses where patients can

receive massages - essential oil blends created with medical approval for relaxation, to reduce contractures, mitigate mental clouding, but also to sanitise the premises thanks to the well-known antibacterial effects. The second is centred on "palliative care centres" that offer the patient a choice of oils and are exclusively for external use (relaxation, respiratory problems, emotions, night-time panic, infected wounds), with very occasional administration by mouth (hiccups). The oils used are listed in detail.

From a more general viewpoint, a long list of the symptoms treated is discussed with evaluation sheets: cramps, constipation, nausea, erythema, acne, headaches, anxiety, etc., along with a discussion on the problems of synergies. An analysis of the implementation of a comparative clinical study by nurses at the Saint-Vincent Hospital is discussed in detail.

The same goes for the Saint Jean Bruxelles Clinic with its palliative care department, Saint-Luc Hospital with its paediatric hematology/oncology department and the Mouscron Hospital Centre where a collaborative aromatherapy project (doctors, pharmacists, etc.) is under way.

Because of this, there will be a high level of acceptance from patients, their families and those who care for them. This is indicated in the sheets for evaluating patient condition before and after use, and for evaluating the satisfaction of all those involved (patient - family - nurse). The results are in the order of 60 to 90%. At the same time, an approach for evaluating the synergies within the blends of essential oils is addressed with acknowledgement of the difficulties of such a study (scheduling problems - placebo effect, etc.).

In conclusion, this enlightening study on Belgium shows that essential oils are apparently useful in other countries besides France, and with some success, serving as a good example for the development of these complementary medicines in the expansion of wellness, in particular for psychosomatic problems, and the reduction of medications.