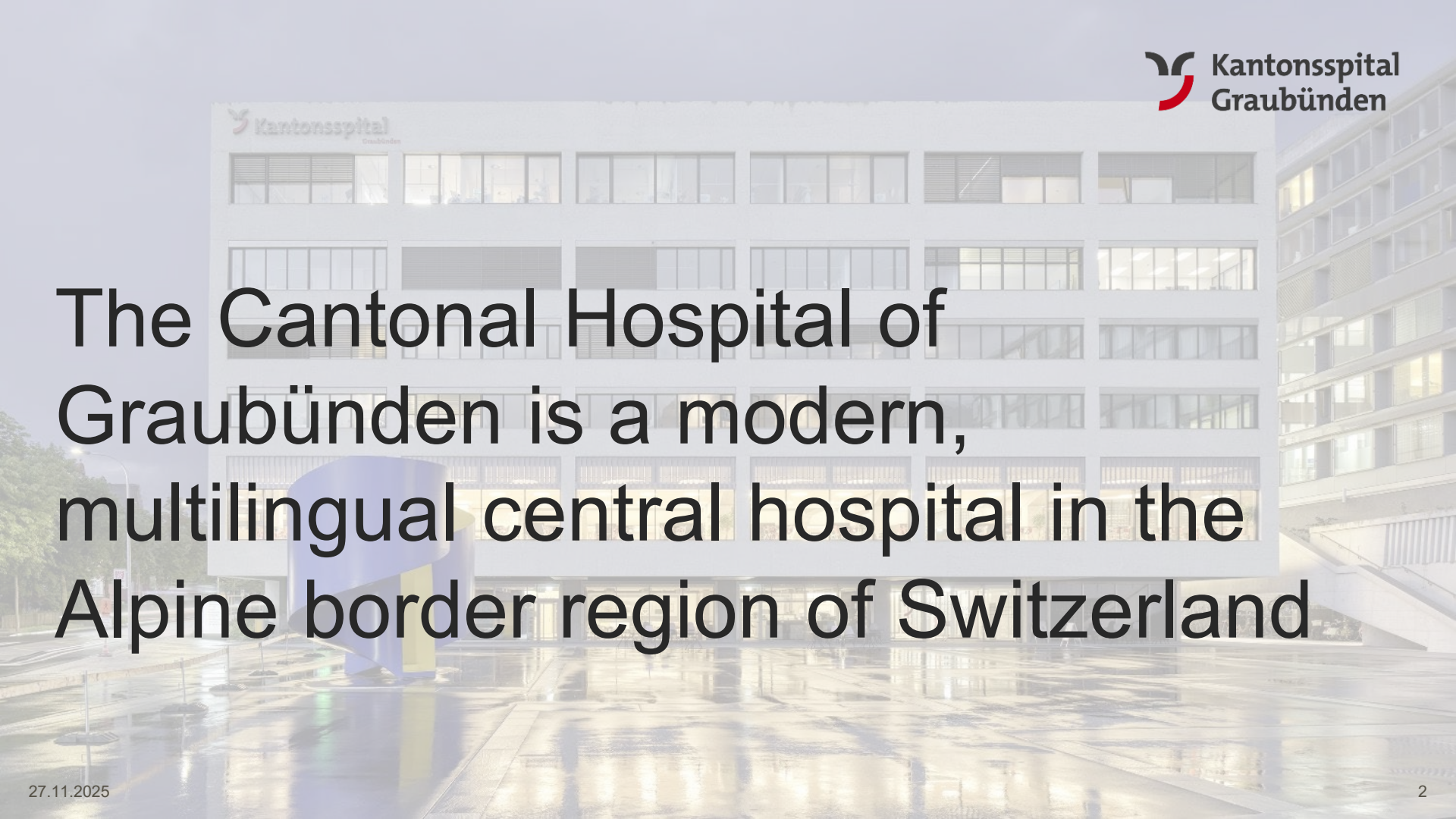


Aromashowcase, 04.12.2025

The influence of essential oils on the pre- and post-operative well-being of children and adolescents



The Cantonal Hospital of
Graubünden is a modern,
multilingual central hospital in the
Alpine border region of Switzerland

Integrated pediatric clinic

We treat approximately 2,400 children per year, 400 of whom are in the pediatric intensive care unit and provide 900 consultations in the outpatient clinic. Approximately 240 operations are performed each year.

Pediatric and adolescent medicine with a wide range of pediatric services
0-18 years



Aromatherapy at the Cantonal Hospital of Graubünden

The use of essential oils has been established at the KSGR since 1995.

Since 2005, there has been a specific care concept for pediatric and adolescent medicine.

This is continuously adapted and evaluated according to needs.

Nursing staff trained in aromatherapy apply aromatherapy on their own responsibility.

Patients and relatives are instructed in how to use aromatherapy.



For us, aromatherapy is a complementary and effective care method that enables us to respond specifically to specific care problems and patient needs.

We connect with patients through scent and touch and support them in alleviating their symptoms.

This can be experienced as calming, pain-relieving, soothing and relaxing.

The aromatherapy products and aroma blends are produced in our in-house pharmacy according to recipes developed by aromatherapy experts.



Starting point

Request from the recovery room for the use of scent sticks for children and adolescents.

Their observations showed that children and adolescents often arrive at the recovery room feeling very nervous and restless.

Since 2020, scent sticks have been used for adults in the recovery room, among other things to promote stress tolerance or to combat post-operative nausea.

At the children's clinic, scented 'scented ghosts' are used to calm children – a proven approach with younger children.

However, these are unsuitable in the perioperative area (ambient scenting).



Interdisciplinary collaboration between the paediatric clinic and recovery room teams

Objective:

To evaluate whether individually selected essential oils, administered in the form of scent sticks, can reduce preoperative nervousness and postoperative restlessness in children and adolescents, thereby enhancing their emotional well-being.

Studies show that when patients enter the operating theatre feeling anxious and nervous, they also wake up feeling anxious, nervous and restless in the recovery room.

Training of both teams by an expert in aromatherapy.

27.11.2025

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Procedure

Our tried-and-tested individual oils, which are already used as dry inhalation/fragrance sprays for homesickness or anxiety, are applied.

A maximum of 2 to 3 fragrances were offered to choose from (to avoid overwhelming or confusing the patients).



Bergamot
Tart and fruity



Bergamot mint
Minty and lemony



Lavender
*Floral and
herbaceous*



Mandarin
Fruity and sweet



Vanilla
Sweet and warm

Riechstift



Scent stick

The use of the scent stick in the pediatric unit began up to 2 hours before surgery and was continued during transfer to the operating theatre.

The scent stick could be used by the child during the journey to the operating room and was also reused postoperatively in the recovery room.



- A questionnaire was completed preoperatively by the parents or the adolescent themselves.
- Another questionnaire was completed by the nursing staff in the operating room.
- After the operation, the nursing staff in the recovery room completed a questionnaire.
- Finally, the parents or the adolescent themselves completed the final questionnaire.
- Of the 64 children and adolescents who participated, only 52 data sets could be evaluated, as at least the preoperative and postoperative questionnaires had to be available.

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Riechstift KIM Dokumentationsblatt für die Evaluation der Aromapflege

Antwortschlüssel Sie so
 Kennzahl

☐ 00 ☐ 01 ☐ 02
☐ 03 ☐ 04 ☐ 05

► FÜR PFLEGEFACHPERSONEN

1. PATIENTENETIKETTE *(als Ständer im Inneren des Rahmens aufkleben)*

Bitte füllen Sie bei der Anwendung eines Riechstifts das Dokumentationsblatt für die Aromapflege aus und geben dieses an **Eltern/Kind/Jugendliche** zum Ausfüllen ab. Bitte kreuzen Sie an und geben Sie das ausgefüllte Dokumentationsblatt nach Patientenaustritt ins Fach der ausgefüllten Aromapflegeblätter. Vielen Dank.

2. Department/Stations

KIM

3. Indikationen für den Riechstift

Coping, Stressresistenz

☐ präoperativ
☐ postoperativ

4. Auswahl des ätherischen Öls für den Riechstift

☐ Bergamotte
☐ Bergamotminze
☐ Lavendel fein
☐ Mandarine rot
☐ Vanille

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27.11.2025

Benefits

The present results indicate that individually selected essential oils in the form of scent sticks can have a positive effect on the emotional well-being of children and adolescents in the perioperative setting.

The majority of participants reported a calming effect, especially with scents such as vanilla, mandarin and lavender.

Criterion	Number
Data sets analysed	52
Girls	22
Boys	30
Children	44
Young people aged 14 and above	8
Average age	9,63

Results	
Preoperative: Positive condition of the participant	25
Preoperative: Negative condition of the participant	2
Not completed	25
Postoperative: Participant's condition positive	29
Postoperative: Participant's condition negative	1
Not completed	22

Highlights

The use of individually selected essential oils in the form of scent sticks is a resource-saving, effective measure that is accepted by children, adolescents and their relatives to promote emotional well-being in the perioperative setting.

Criterion	Number
Assessment of the participants' well-being by nursing staff in the airlock	
Calm, relaxed	33
Nervous, fidgety	3
Crying	2
Assessment of the participants' well-being by nursing staff in the recovery room	
Calm, relaxed	39
Nervous, fidgety	5
Crying	0

Conclusion

- The effectiveness of essential oils could be verified from different perspectives, by specialists and users.
- It was rather difficult for the children and adolescents to formulate their perceptions.
- Questionnaires in the various areas were difficult to coordinate (many missing details).
- Smell sticks are highly accepted by parents/children/adolescents.
- The scent sticks have been in use ever since, and in the meantime, the ginger scent stick for PONV (postoperative nausea and vomiting) has been introduced.
- Cooperation across departments was key and increased parents' trust.

Herzlichen Dank

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