



“This was 2000 times better than math”

The Enduring Impact of a Community Pharmacist-led Theme Day on Medication Knowledge Among Primary School Students

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Conclusion:
Primary school students taught by community pharmacists during the School-Medicine Theme Day expressed high satisfaction and proposed constructive ideas for its enhancement. Importantly, they demonstrated significant *gains in medication knowledge*, underscoring the effectiveness of such educational initiatives



Background:

Despite increasing use of medication among children and their autonomy in handling medicines, Danish primary school children lack a formal curriculum on medication education.

To address this gap, an interdisciplinary group developed and conducted the "School-Medicine Theme Day" (SMT) in 2022-2023.

In the SMT community pharmacists did a full day of interactive sessions for 4th-6th grade classes.

The SMT comprised 10 hands-on activities aimed at imparting knowledge on safe medication use and handling.

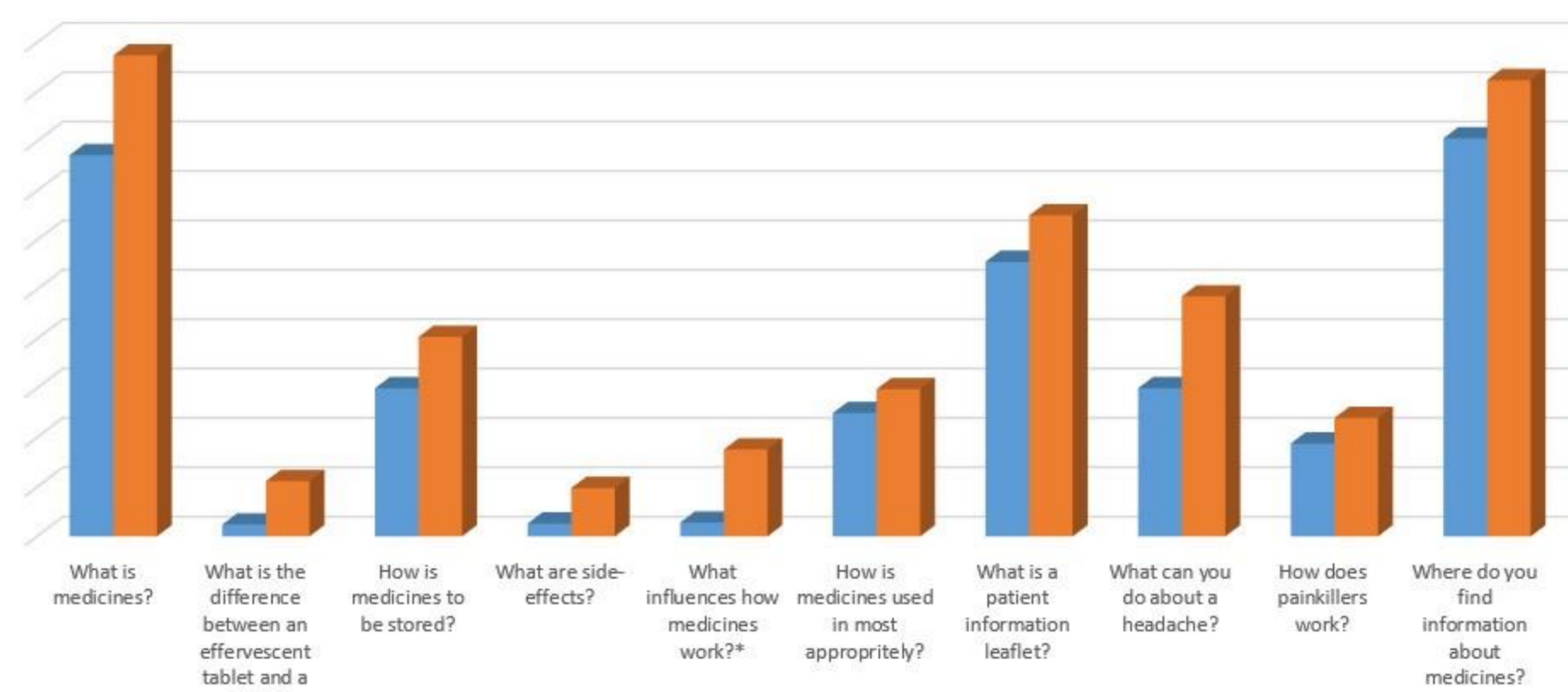
PROGRAM FOR
Skole·Medicin·TEMA dag

1. Prior to the theme day (1-2 weeks): Survey of student knowledge and competencies; two exercises and letter to parents
2. The theme day: 7-8 exercises
3. After the theme day (2-3 months): Survey of student knowledge and competencies repeated

For details on program, see [handout](#)

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Student knowledge prior to and after the School-Medicine Theme Day (n=2.343):



* In question 5 a negative difference is converted to a positive difference by adding 2+ at both before and after
Attention: The columns can only be compared across the same question – not across column pairs

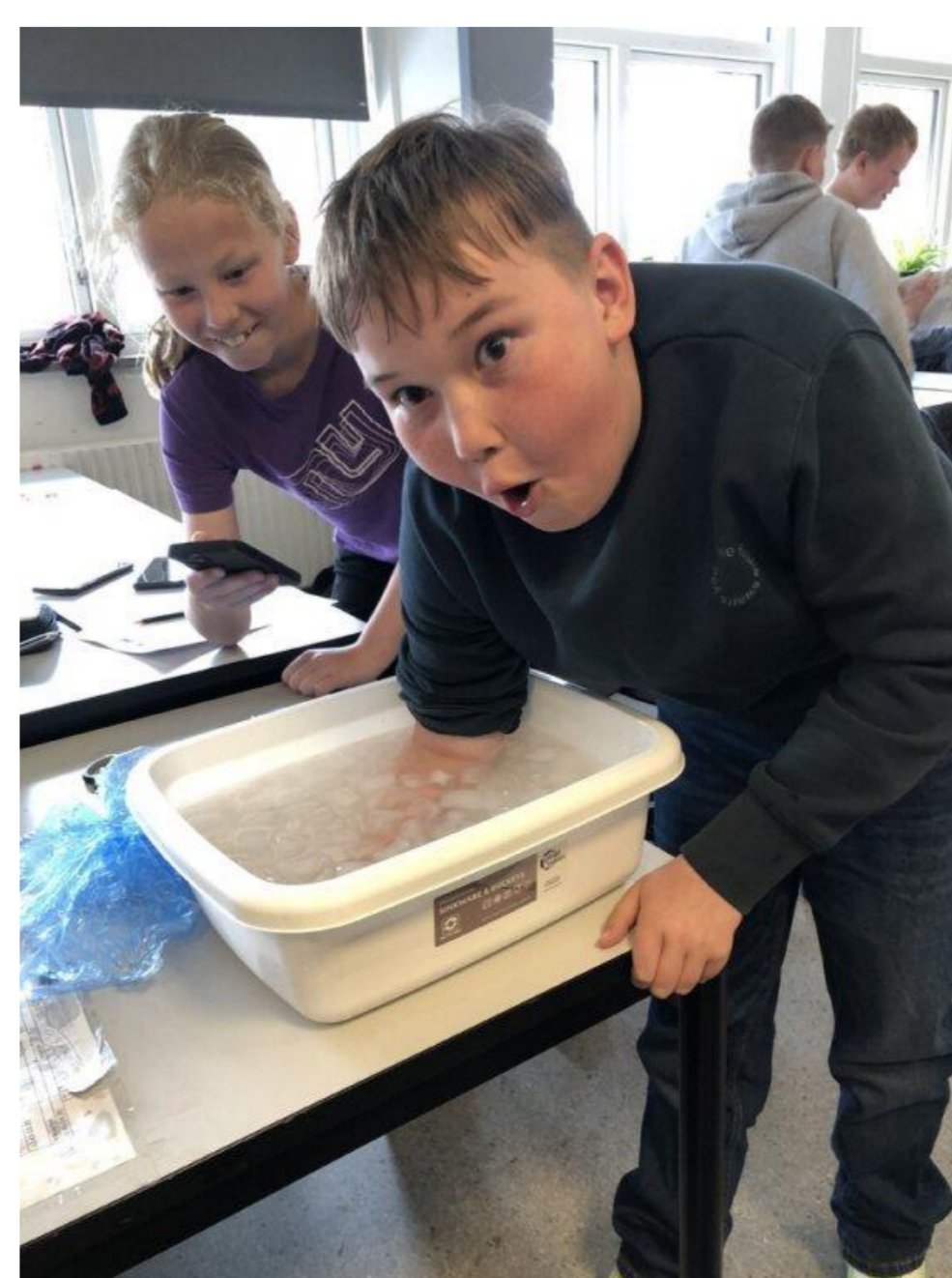
Objectives:

To examine the long-term impact of the SMT on the knowledge of the students about the use and handling of medicine and to qualitatively describe their learning experiences and ideas for developing the day.

Method:

1) A *questionnaire survey* was administered to 81 participating classes approximately one week before and 1-2 months after the SMT, assessing knowledge based on the day's objectives. Responses were scored and quantitatively analyzed.

2) Additionally, an evaluation *email* soliciting feedback the participating pharmacists and teachers was sent to gather qualitative insights from students, which were *thematically analyzed*.



Results from questionnaire survey:

From the 81 school classes 1394 students replied to the pre-teaching survey and 949 students (68%) replied to the post-teaching survey. The response rate for both surveys was 80%.

A Wilcoxon analysis comparing the answers of the individual questions in the two surveys at population level indicated significant learning for 9 out of 12 questions.

Results from qualitative analysis:

Appr. 25% of the teachers/pharmacists responded.

The students expressed high satisfaction with the SMT and provided valuable suggestions for its refinement:

- Reduce activity load
- Retain tactile experiences (e.g., pain threshold exercise, games, handling medicine products)
- Shorten the duration of the SMT

According to the respondents, students expressed high satisfaction with the SMT as indicated in the following quotes:

“This is 2000 times better than math”

“Though I am not interested in medicines, this was exiting”

“We learned a lot about different types of medicines”

“The exercise with hand in water was the most exiting”

“I found out why my grandparents use medicines”

“I didn’t know that there was so much medicines, and that medicines can be dangerous”

<https://farmaci.ku.dk/uddannelse/skole-medicin-temadagen/>