

# NOS! (To the Operating Room!)

## The Positive Effects of Healthcare Clown Intervention on Children Undergoing Surgery

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Up to 60% of children suffer from preoperative anxiety. A clown visit is one of the alternative means of reducing the level of stress before a surgical procedure. As part of the NOS! programme, research on the positive effects of Healthcare Clown intervention took place at Motol University Hospital in Prague (Czech Republic) in 2020.

### What is NOS!?

The Healthcare Clown programme called NOS! (To the Operating Room!) is for children preparing to undergo a surgical procedure. A healthcare clown spends time with paediatric patients and their parents before surgery.

The NOS! programme was established in 2013 and is currently available at seven hospitals in the Czech Republic: Motol University Hospital in Prague, Pilsen, Ostrava–Poruba, Hradec Králové, Olomouc, Třinec, and Children's Hospital in Brno.

### Why is the research important?

Confirms that the presence of a Healthcare Clown in the NOS! programme has positive effects on the behaviour and mood of children and their parents. These effects persist even after the clown leaves.

### What did the research look like?

Researchers focused on 62 randomly chosen patients between the ages of five and twelve years who were divided into two groups:

- Intervention group – the presence of a clown
- Control group – the absence of a clown

This was followed by evaluation of video recordings and questionnaires:

- Observation (video recording, series of observation points) and evaluation using the mYPAS tool
- Measurements using questionnaires for children and parents as well as for caretakers after the child is taken to the operating room; PedsQL, CPRS, and an emoticon scale were used at different stages of the research

### Research findings

- 1** Children in the intervention group awaiting premedication and transfer to the operating room displayed more positive emotions than children in the control group.
- 2** The positive effects of the presence of a Healthcare Clown on interaction between children and their caregivers persisted even when the clown was no longer present.
- 3** Parents in the intervention group reported a better mood than parents in the control group, especially during the waiting and premedication phase. These results suggest that the presence of a Healthcare Clown indirectly improved mood of the caregivers even when the clown was not present. The good mood of parents could therefore have subsequently influenced the child's positive behaviour.
- 4** Children accompanied by a Healthcare Clown while waiting for surgery reacted more positively than children who were not accompanied by a clown. They were **calmer, expressed more positive emotions, and were typically in a better mood.**

### What is Zdravotní klaun? (Healthcare Clown)

Zdravotní klaun (Healthcare Clown) is a nonprofit organization that has been helping primarily paediatric patients get through the treatment process with a smile since 2001. It also works with geriatric care facilities. **In the Czech Republic, there are 93 Healthcare Clowns who regularly visit 63 hospitals, 10 nursing homes, and a hospice.**

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The mission of Healthcare Clown is to bring joy, a good mood, and hope to places where it tends to be so scarce. These mainly include children's hospital rooms, specialized departments, households caring for seriously ill children, and other paediatric medical facilities.



The complete material **NOS! Na Operační Sál! The Positive Effects of Healthcare Clown Intervention on Children Undergoing Surgery** is available for download at [www.zdravotniklaun.cz](http://www.zdravotniklaun.cz) in the section Naše programy/Výzkum.



The expert research text in English – **'To the Operating Room! The Positive Effects of Healthcare Clown Intervention on Children Undergoing Surgery'** – was published at [www.frontiersin.org/articles/10.3389/fpubh.2021.653884/full](http://www.frontiersin.org/articles/10.3389/fpubh.2021.653884/full)