## **Abstract**

**Premises:** This thesis focuses on mapping the share of fear and procedural pain during Covid-19 vaccination of children aged 5 to 18 years.

**Objectives:** The aim of the bachelor thesis was to map the extent of fear and procedural pain during Covid-19 vaccination and to determine which factors influence them.

**Methodology:** Data collection for this bachelor thesis took place at the vaccination centre of the Motol University Hospital and Thomayer University Hospital. The statistical dataset was collected from 39 children meeting inclusion and exclusion criteria. The questionnaire survey was conducted personally by approaching the parent whose child was vaccinated against Covid -19, obtaining the parent's written informed consent to provide information, obtaining the child's verbal consent, and then conducting a 5-10 minute joint interview while asking questions.

**Results:** Based on the statistical data processing, a statistical dependency was confirmed in the perceived intensity of pain during injection between girls and boys. The differences lie in the fact that girls show a greater dispersion in responses, meaning they distinguish the perceived pain more, while boys generally report the same intensity of pain. From the analysis of hypotheses, a significant statistical correlation was also found between the level of fear before vaccination and the number of doses, when the fear was decreasing with the number of doses of the Covid-19 vaccine received. A strong correlation was also confirmed between fear and pain during injection, when increased fear before vaccination leads to increased intensity of pain during injection and increased fear after vaccination.

Conclusion: The confirmed positive correlation between the level of fear before and after vaccination and the intensity of pain during injection is in line with the presented findings in the theoretical part of the thesis. The mutual relations between fear before the vaccination, pain during the injection, and fear after the vaccination indicates the importance of preventing and reducing fear before vaccination, and gives the opportunity for nursing interventions and strategies focused primarily on reducing fear and anxiety before the vaccination. The increased anticipated fear and anxiety in children before needle procedures are largely associated with the behaviour and attitudes of the parents, their situational distress, and the expectation of the child's distress by the parents (Racine et al., 2016a). Based on these findings, it is suitable to focus nursing interventions not only on the children themselves but also on their parents.

**Keywords:** vaccination, needle, children, procedural pain, fear, emotions