

# **Ametop Alone vs. Ametop and Vapocoolant Spray to Reduce Pain on IV Insertion in Pediatric Patients**

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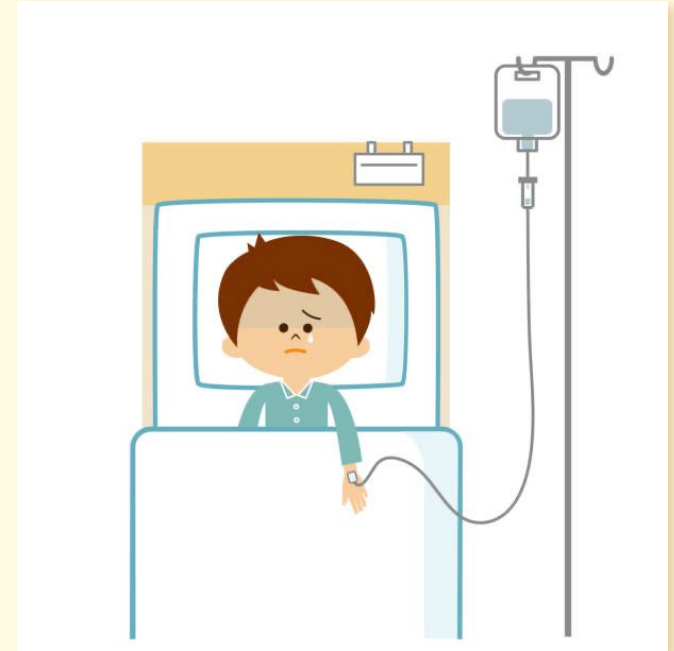
# Introduction

**Background:** IV insertion causes fear in children

**Research:** Randomized trial with FPS-R assessments

**Procedures:** Ametop alone vs. Ametop + Vapocoolant

**Impact:** Better medical care for children

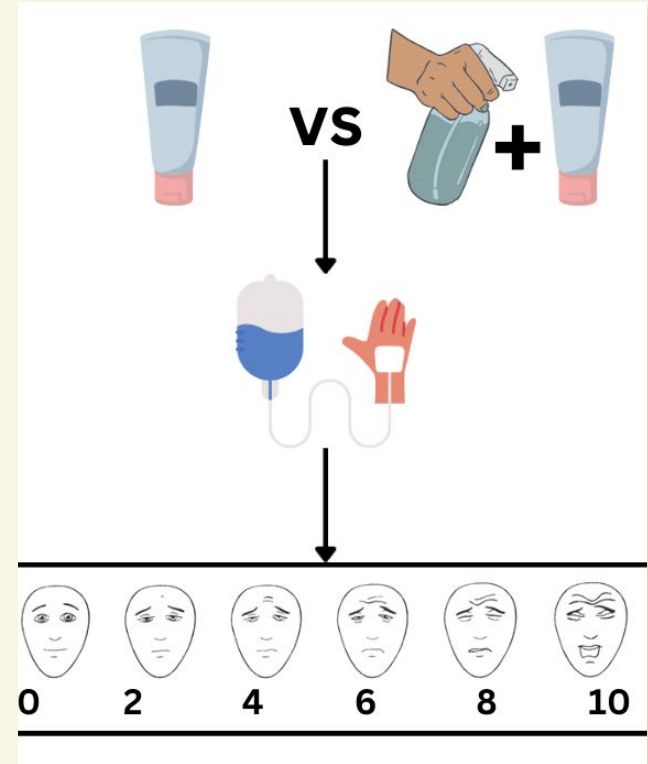


# Objectives

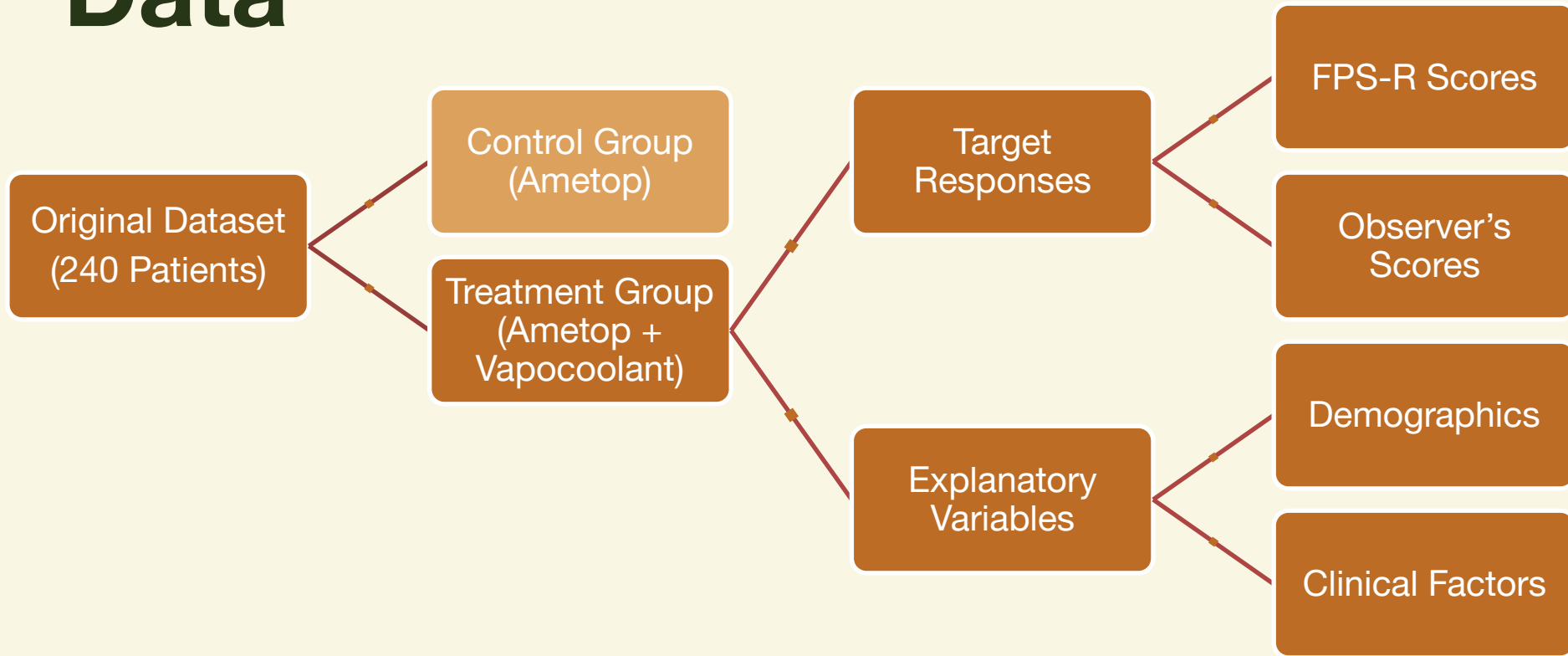
**Main Objective:** Ametop alone vs. Ametop + vapocoolant spray to reduce pain in IV insertion

**Secondary Objectives:**

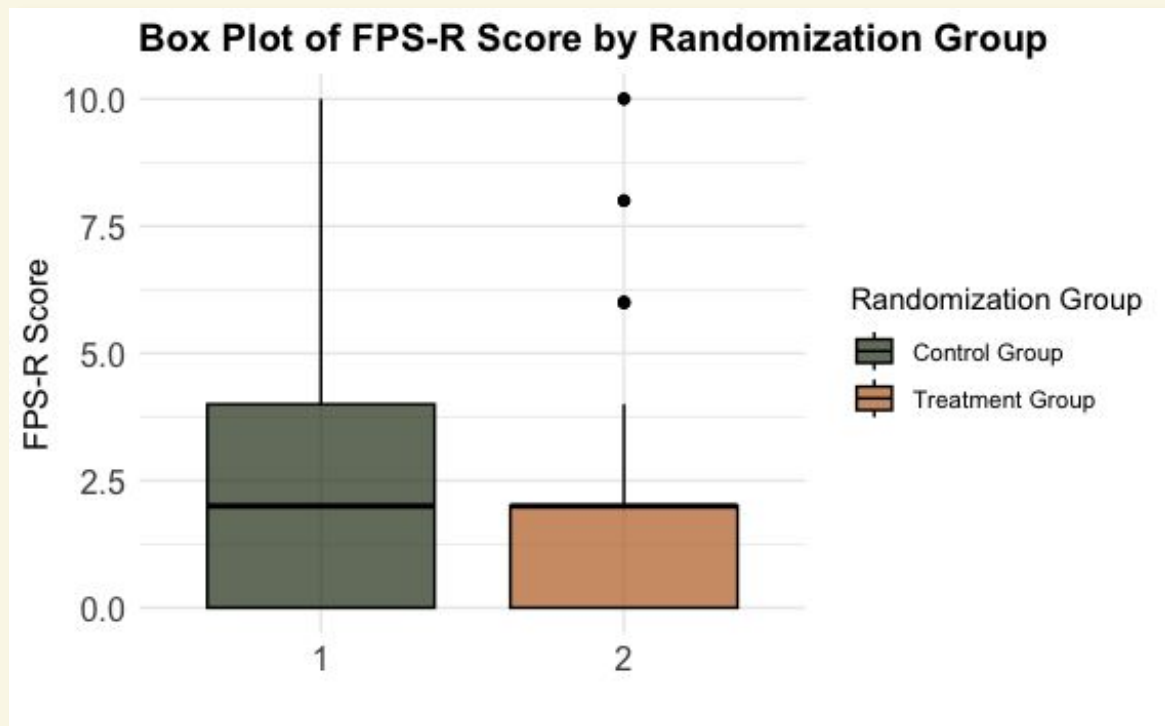
- Age, gender, practitioner's role, number of IV attempts, and needle gauge used influence on the level of pain experienced
- Side effects due to the Ametop or vapocoolant spray



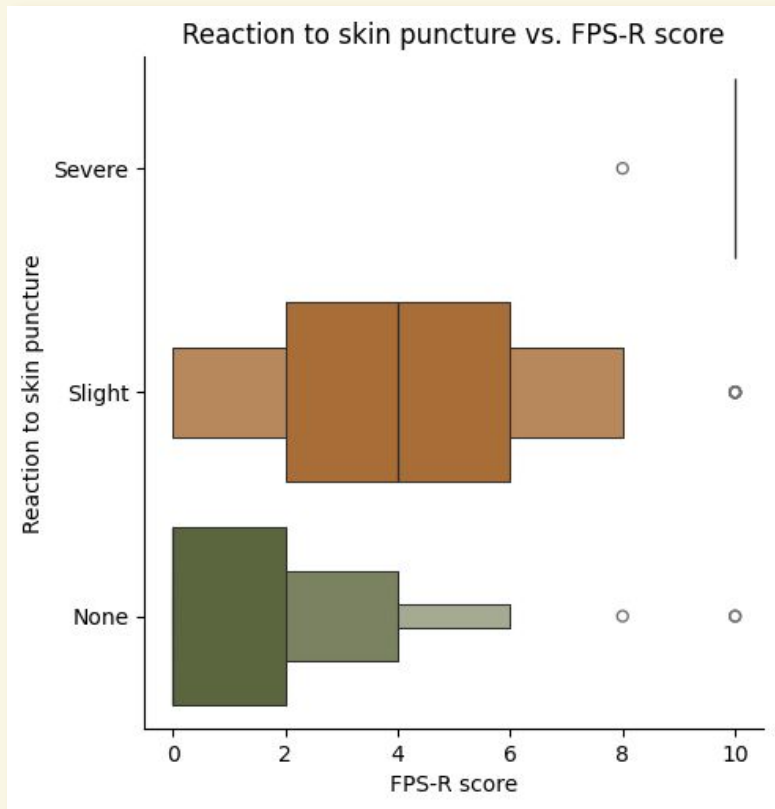
# Data



# Exploratory Data Analysis



# Exploratory Data Analysis



		FPS-R Score		
		0 & 2	4 & 6	8 & 10
Reaction to Skin Puncture	Severe	0	0	5
	Slight	24	24	12
	None	135	20	3

# Statistical Analysis Plan

**Main Objective:** Ametop vs. Ametop + Vapocoolant Spray

- T-test: The mean FPS-R scores are the same for the two groups

**Secondary Objectives:**

- Regression (with interactions): test the significance of each variables
- Side effects incidences: data visualization (pie chart)

# Reference

putiko. (2023). *Hospitalization Illustration material of depressed child stock illustration*. Retrieved 2023,.

Kohli, M. L., Vali, R., Amirabadi, A., & Shammash, A. (2019). *Faces Pain Scale-Revised (FPS-R)*. Retrieved 2019,.