

# PENGARUH PIJAT BAYI SEBELUM IMUNISASI TERHADAP RESPON NYERI INJEKSI IMUNISASI DPT-HB-Hib DI PUSKESMAS DANUREJAN I

Aida Saskia Dwi Handayani<sup>1</sup>, Sujiyatini<sup>2</sup>, Mina Yumei Santi<sup>3</sup>

<sup>1,2,3</sup>Jurusan Kebidanan Poltekkes kemenkes Yogyakarta

Jl. Mangkuyudan MJ III/304, Mantrijeron, Kota Yogyakarta

<sup>1</sup>email: [aidasdhy9@gmail.com](mailto:aidasdhy9@gmail.com)

## ABSTRAK

**Latar belakang:** Imunisasi merupakan tindakan pemberian vaksin yang bertujuan untuk merangsang sistem imun tubuh dalam membentuk antibodi dan kekebalan. Meskipun begitu, prosedur pemberian imunisasi dapat menyebabkan kerusakan jaringan yang mengakibatkan terstimulasinya respon nyeri dan jika tidak ditangani dengan baik akan menimbulkan trauma fisiologis dan psikologis jangka panjang pada bayi. Oleh karena itu, diperlukan pengelolaan respon nyeri yang terjadi melalui pijat bayi. Pijat bayi merupakan salah satu metode nonfarmakologi yang dapat merangsang reseptor saraf di kulit untuk menghambat transmisi nyeri ke otak, memengaruhi sistem limbik dalam meredakan stres, dan memicu pelepasan endorfin untuk memberikan rasa nyaman dan relaksasi.

**Tujuan:** Mengetahui pengaruh pijat bayi sebelum imunisasi terhadap respon nyeri injeksi imunisasi DPT-HB-Hib di Puskesmas Danurejan I.

**Metode:** Jenis Penelitian ini adalah *quasy experiment pretest-posttest with control group design*. Total sampel sebanyak 38 bayi (19 kelompok eksperimen dan 19 kelompok kontrol). Penelitian menggunakan skala nyeri FLACC. Analisa data menggunakan uji *Independent t-test*.

**Hasil:** Diperoleh perbedaan rerata respon nyeri bayi pada kelompok eksperimen dan kelompok kontrol saat injeksi imunisasi DPT-HB-Hib di Puskesmas Danurejan I Tahun 2025. Kelompok eksperimen yang diberikan pijat bayi memiliki rerata respon nyeri 4,0 dan kelompok kontrol dengan pemberian pijat ekstremitas memiliki rerata respon nyeri 4,95 dengan *p-value* = 0,011 dengan nilai  $\alpha=0,05$ .

**Kesimpulan:** Ada pengaruh pijat bayi sebelum imunisasi terhadap respon nyeri injeksi imunisasi DPT-HB-Hib di Puskesmas Danurejan I.

**Kata Kunci:** pijat bayi, nyeri, imunisasi

**THE EFFECT OF BABY MASSAGE BEFORE IMMUNIZATION ON PAIN  
RESPONSE OF DPT-HB-Hib IMMUNIZATION INJECTION AT  
DANUREJAN I COMMUNITY HEALTH CENTER**

Aida Saskia Dwi Handayani<sup>1</sup>, Sujiyatini<sup>2</sup>, Mina Yumei Santi<sup>3</sup>

<sup>1,2,3</sup>Jurusan Kebidanan Poltekkes kemenkes Yogyakarta

Jl. Mangkuyudan MJ III/304, Mantrijeron, Kota Yogyakarta

<sup>1</sup>email: [aidasdhy9@gmail.com](mailto:aidasdhy9@gmail.com)

**ABSTRACT**

**Background:** Immunization is a medical intervention that involves administering vaccines to stimulate the immune system to produce antibodies and develop disease-specific immunity. However, the injection process can cause tissue damage that results in the stimulation of pain responses and if not handled properly will cause long-term physiological and psychological trauma to the baby. Therefore, appropriate pain management is needed, one of which is through baby massage. Baby massage is one of the non-pharmacological methods that can stimulate nerve receptors in the skin to inhibit pain transmission to the brain, affect the limbic system in relieving stress, and trigger the release of endorphins that provide comfort and relaxation.

**Objectives:** To determine the effect of baby massage before immunization on pain response of DPT-HB-Hib immunization injection at Danurejan I Community Health Center.

**Method:** This study used a quasi-experimental design with a pretest-posttest and control group. A total of 38 babies participated, divided equally into an experimental group and a control group (19 each). Pain response was measured using the FLACC pain scale. The data were analyzed using the Independent t-test.

**Result:** A significant difference in the average pain response was found between the experimental and control group during the DPT-HB-Hib immunization injection. The experimental group, which received baby massage, showed an average pain score of 4.0, while the control group, which received extremity massage, had an average score of 4.95. The difference was statistically significant with a p-value of 0.011 at a significance level of  $\alpha = 0.05$ .

**Conclusion:** There is an effect of baby massage before immunization on pain response of DPT-HB-Hib immunization injection at Danurejan I Community Health Center.

**Keyword:** baby massage, pain, immunization