

# THE EFFECTIVENESS OF EARLY MOBILIZATION ON INTESTINAL PERISTALSIS FREQUENCY FOR POST-OPERATIVE PATIENTS WITH GENERAL ANESTHESIA AT PKU MUHAMMADIYAH YOGYAKARTA HOSPITAL

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## ABSTRACT

**Background:** Surgery is an invasive treatment that requires anesthesia and is done by opened a part of the body. The administration of anesthesia causes an obstruction of nerve impulse at the neuromuscular junction, maked the gastrointestinal muscle relax. Inhalation of anesthesia blocks parasympathetic nerve impulses to the intestinal muscles thereby slowed down or stopped peristalsis. If peristalsis does not return within 2 to 3 hours after surgery, it can caused persistent intestinal paralysis, serious complications, or paralytic ileus. One measure that can be done to help restored intestinal peristalsis is early mobilization deep breathing, effective cough, and leg exercises.

**Purpose:** This study aims to identify the effectiveness of early mobilization on intestinal peristalsis frequency for post-operative patients with general anesthesia.

**Method:** This quasi-experiment study involved 63 subjects devided into three groups selected by consecutive sampling method. The data was analized by One-Way Analysis of Variance (ANOVA) test and Tukey Post-Hoc Test.

**Result:** The results showed that the effective early mobilization was early mobilization 4 hours after completion of surgery with mean increased of intestinal peristalsis frequency 7.71 times/s, early mobilization 6 hours after completion of surgery mean increased of intestinal peristalsis frequency 4.91 times/s, and early mobilization 8 hours after completion of surgery mean increased of intestinal peristalsis frequency 1.66 times/s, the One-Way Analysis of Variance (ANOVA) test result 29,941 and a sig of 0,000 ( $p < 0.05$ ).

**Conclusion:** There was a significant mean difference of intestinal peristalsis frequency between patients with early mobilization 4 hours after completion of surgery, early mobilization 6 hours after completion of surgery, and early mobilization 8 hours after completion of surgery.

**Keywords:** early mobilization, intestinal peristalsis, general anesthesia

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# **EFEKTIVITAS MOBILISASI DINI TERHADAP FREKUENSI PERISTALTIK USUS PADA PASIEN *POST OPERASI* DENGAN *GENERAL ANESTESI* DI RS PKU MUHAMMADIYAH YOGYAKARTA**

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## **ABSTRAK**

**Latar Belakang:** Pembedahan merupakan tindakan invasif dengan membuka bagian tubuh dan memerlukan anestesi. Pemberian obat pelumpuh otot menyebabkan terhalangnya impuls saraf di sambungan saraf - otot sehingga otot gastrointestinal relaksasi dan anestesi inhalasi menghalangi impuls saraf parasimpatis ke otot intestinal sehingga memperlambat atau menghentikan peristaltik. Apabila peristaltik tidak kembali dalam 2 - 3 jam setelah pembedahan dapat menyebabkan paralisis usus menetap, komplikasi serius, dan ileus paralitik. Salah satu upaya yang dilakukan untuk membantu memulihkan peristaltik usus yaitu dengan tindakan mobilisasi dini nafas dalam, batuk efektif, dan latihan tungkai.

**Tujuan:** Tujuan penelitian ini yaitu mengetahui efektivitas mobilisasi dini terhadap frekuensi peristaltik usus pada pasien *post operasi* dengan *general anestesi*.

**Metode:** Jenis penelitian *quasy eksperiment*, sampel berjumlah 63 responden yang terbagi menjadi 3 kelompok dengan teknik pengambilan sampel *consecutive sampling*. Analisis data menggunakan uji *One-Way Analysis of Variance* (ANOVA) dan uji *Post-Hoc Test Tukey*.

**Hasil:** Hasil penelitian menunjukkan bahwa mobilisasi dini yang efektif adalah mobilisasi dini 4 jam setelah selesai operasi dengan rerata peningkatan peristaltik usus selama 7,71x/menit, pada mobilisasi dini 6 jam setelah selesai operasi rerata peningkatan peristaltik usus selama 4,91x/menit, dan mobilisasi dini 8 jam setelah selesai operasi rerata peningkatan peristaltik usus selama 1,66x/menit, hasil uji One-Way Analysis of Variance (ANOVA) 29,941 dan sig sebesar 0,000 ( $p < 0,05$ ).

**Kesimpulan:** Terdapat perbedaan rerata frekuensi peristaltik usus yang signifikan antara pasien dengan mobilisasi dini 4 jam setelah selesai operasi, mobilisasi dini 6 jam setelah selesai operasi, dan mobilisasi dini 8 jam setelah selesai operasi.

**Kata Kunci:** mobilisasi dini, peristaltik usus, *general anestesi*

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