

## ABSTRAK

### **PENGARUH *AUTOMATIC COUNTING STABILIZER* *CARDIOPULMONARY RESUSCITATION* (ACOUNT STAR CANARI) TERHADAP KUALITAS KOMPRESI PADA RESUSITASI JANTUNG PARU (RJP)**

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**Latar Belakang:** Kualitas kompresi dada sesuai standar sangat penting diimplementasikan, namun masih terdapat kendala yang sering dihadapi sehingga diperlukan inovasi teknologi. Penelitian ini bertujuan untuk mengetahui pengaruh *Automatic Counting Stabilizer Cardiopulmonary Resuscitation* terhadap kualitas kompresi pada Resusitasi Jantung Paru.

**Metode:** Desain penelitian tahap I *Research and Development*, tahap II *quasy experiment*. Sampel penelitian ini adalah mahasiswa keperawatan semester 7, total sampel adalah 80 responden (40 kelompok intervensi dan 40 kelompok kontrol) dengan teknik *simple random sampling*. Kelompok intervensi menggunakan *Automatic Counting Stabilizer Cardiopulmonary Resuscitation*, kelompok kontrol menggunakan prosedur standar. Penelitian ini dilakukan dengan cara mengobservasi kecepatan kompresi dengan memperhitungkan kedalaman kompresi. Instrumen penelitian menggunakan *Automatic Counting Stabilizer Cardiopulmonary Resuscitation*, manekin RJP, *Usability USE Questionnaire*, dan kuesioner pakar. Penelitian menggunakan analisis deskriptif dan analisis bivariat uji *Mann-Whitney*.

**Hasil:** Hasil menunjukkan *Automatic Counting Stabilizer Cardiopulmonary Resuscitation* berpengaruh terhadap kualitas kompresi pada Resusitasi Jantung Paru ( $p\text{-value} < 0,001$ ). Nilai *mean rank* pada kelompok intervensi sebesar 53,44 dan *sum rank* sebesar 2137,5 lebih besar dibandingkan dengan *mean rank* kelompok kontrol sebesar 27,56 dan *sum rank* sebesar 1102,5.

**Kesimpulan:** *Automatic Counting Stabilizer Cardiopulmonary Resuscitation* mampu meningkatkan kualitas kompresi pada Resusitasi Jantung Paru, sehingga dapat menjadi inovasi teknologi yang mendukung penatalaksanaan kompresi dada yang sesuai standar.

**Kata Kunci:** *Automatic Counting Stabilizer Cardiopulmonary Resuscitation*, Kompresi Dada, Resusitasi Jantung Paru

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## ABSTRACT

### THE IMPACT OF AUTOMATIC COUNTING STABILIZER CARDIOPULMONARY RESUSCITATION (ACOUNT STAR CANARI) TOWARDS COMPRESSION QUALITY IN CARDIOPULMONARY RESUSCITATION (CPR)

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**Background:** High-quality chest compressions are essential in CPR, presently challenges persist, requiring technological innovation. This study aims to investigate the effect of Automatic Counting Stabilizer Cardiopulmonary Resuscitation on chest compression quality.

**Methods:** This study used a Research and Development design for phase I and a quasi-experimental design for phase II. The study sample consists of 80 nursing students in the 7th semester, with 40 respondents in the intervention group and 40 in the control group, selected with simple random sampling. The intervention group used the Automatic Counting Stabilizer Cardiopulmonary Resuscitation, while the control group with the standard procedure. The study observed compression speed while considering compression depth. Instruments used the Automatic Counting Stabilizer Cardiopulmonary Resuscitation device, CPR manikins, the Usability USE Questionnaire, and an expert questionnaire. Descriptive analysis and bivariate analysis using the Mann-Whitney test are employed for data analysis.

**Results:** The results show that the Automatic Counting Stabilizer Cardiopulmonary Resuscitation significantly affected the quality of chest compressions in CPR (p-value < 0.001). In comparison to the mean rank of the control group which is 27,56 and the sum rank is 1102,5 but the mean rank of the intervention group is 53,44 and the sum rank is 2137,5 which is greater.

**Conclusion:** The Automatic Counting Stabilizer Cardiopulmonary Resuscitation can improve the quality of chest compressions in CPR, thus representing a technological innovation that supports the management of chest compressions in accordance with established standards.

**Keywords:** Automatic Counting Stabilizer Cardiopulmonary Resuscitation, Chest Compression, Cardiopulmonary Resuscitation

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