

## **ABSTRACT**

### **COMPARISON OF TABLET FRIABILITY TEST OF PANADOL TABLET AND PANADOL CHEWABLE PREPARATIONS**

**Mariatul Kiftiyah**

Medicine is a very important element in health care. Most medical interventions use drugs, therefore drugs must be available when needed in sufficient types and quantities, have real efficacy and good quality. Drugs circulate in various dosage forms, one of which is medicine in tablet form.

Panadol is a tablet containing the active ingredient paracetamol which has the characteristics of a white powder, odourless and slightly bitter taste. Panadol has analgesic and antipyretic properties that are often used to treat pain in fever, pain, and headaches. It works by means of  $C_8H_9NO_2$  and the chemical structure of 4'-Hydroxyacetanilide with a molecular weight of 151.16 grams/mol.

This study aims to determine the effect of Panadol tablet and Panadol chewable dosage forms on tablet characteristics which include friability tests with active ingredients of paracetamol tablets.

The results showed that the test results in the friability test of both dosage forms met the requirements with the % friability between tablets W before and W after the tablet met the friability test requirements where tablets that meet the requirements of good friability do not exceed  $<0.8\%$ .

The results of the statistical test show that in the normality test, the significance value is obtained in (W1 Panadol tablets = 0.008) and (W2 Panadol chewable = 0.451) which shows that the significance value  $> 0.05$  can be decided that the data is normally distributed and can be continued to the homogeneity test which shows the results of the significance value  $> 0.05$ , namely 0.065, which is declared homogeneously distributed data, continued in the independent sample T test obtained the results of the significance value  $< 0.05$ , namely 0.000. It can be stated that the data obtained there is a significant difference between W1 (Panadol tablet) and W2 (Panadol chewable).

Based on the results of statistical tests, it can be concluded that the physical characteristics of the friability of Panadol and Panadol Chewable tablets have met the predetermined test requirements of  $<0.8\%$ .

**Keywords:** Tablet, Chewable, Panadol, Paracetamol, Friability test.