Results of Measurement of Body Temperature with Glass Mercury Thermometer and Digital Axillary Thermometer on Adult Patients at a Hospital in Bandung, Indonesia

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Abstract

In other studies conducted by previous researchers comparing the results of the different methods of temperature measurement, a variety of significant and non-significant results have been seen. The purpose of this comparative research was to compare body temperature measurements taken using a glass mercury thermometer and a digital axillary thermometer on adult patients at a hospital in Bandung, Indonesia. The two groups' independent t-test was used to determine the difference. Twenty-two participants were chosen using convenience sampling technique. The data was collected using a mercury thermometer and digital axillary thermometer on the right axilla of each sample. The results show that the temperature of the body by using mercury thermometer and digital axilla is 38.6682 ± 0.58585 and 38.5636 ± 0.57366 respectively. The significance (2-tailed) of the statistical independent t-test results is p=0.553. The conclusion is that there are no significant differences in the body temperature measurements between a mercury thermometer and a digital thermometer on adult patients. The results of this study may allow for subsequent research into different modes of clinical measurements.

Keyword: Axilla Digital Thermometer, body temperature, comparison, fever, mercury