

Electronic inspection influence over the motorcyclists mortality in the city of Campina Grande, state of Paraíba

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Abstract

Objectives

To identify the influence of the electronic inspection over the motorcyclists mortality in locations where the equipment were implanted.

Methods

The data were collected in public five agencies, newscast and internet, they were standardized, eliminated their duplicities and then posted in a descriptive and inferential analysis. The analysis was made in three moments; three, six, and twelve months after the implantation of the equipment and compared to the same period of the past year. The experiment was given by the analysis of the before and after and the hypothesis H_0 and H_1 , where:

H₀: The electronic inspection has no positive influence on the accidents with motorcyclists.

H₁: The electronic inspection has a positive influence on the accidents with motorcyclists.

The tests used were: Wilcoxon, Kolmogorov Smirnov and Shapiro Wilk at the level of 5% of significance.

Results

In the three moments we verified the reduction of the accidents, being more effective in the third moment (-67%). The number of injured decreased mostly after twelve months (-67%). The number of fatal victims was reduced to zero. The efficiency against running overs was not satisfactory. As for accidents per day, the most efficiency occurred between Friday to Sunday where the average was 10,7 and after it decreased to 2,3 per day. Through the Wilcoxon test, $p\text{-valor}= 0.018$, this reduction is statistically significant to the level of 5% of significance.

Conclusions

The electronic inspection reduces significantly the number of accidents involving motorcyclists on the places where the equipment were implanted.

KEYWORDS.

Accidents, Motorcyclists, Electronic Surveillance, Experiment.