

Abstract

Title : Factors Related to Motorcycle Accidents among Students of Suranaree University of Technology

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The main objectives of this institutional research, Factors Related to Motorcycle Accidents among Students of Suranaree University of Technology, were (1) to study the characteristics of motorcycle accidents occurring in 2009, (2) to study the knowledge, attitudes, and behaviors regarding motorcycle safe riding among students of Suranaree University of Technology, (3) to study the factors related to the motorcycle accidents.

The retrospective study was used for this research. The sample of this study was divided into 2 groups (1) a study group and (2) a control group. The study group composed of 101 undergraduate students with motorcycle accidents in 2009, whereas the control group composed of 101 undergraduate students with no motorcycle accident in 2009, the same gender and institute of the control group, and the age not different from the study group more than 1 year. The questionnaires were used to collect the data. The data were then statistically analyzed using descriptive statistics, Chi-square test or Fisher's Exact Test, and Multiple logistic regression.

The results of the research are as follows:

1. Half of motorcycle accidents were caused by fall by themselves. The highest accidents report occurred on University road 1 and interjunction to gate 1 area (21.8%). Most of riders had riding licenses and experienced more than 2 years for riding. 4-stroke motorcycle was the highest accidents record (55.4%), and the average age of motorcycles was more than 3 years. Before accidents, 17.8 percent of students had consumed alcoholic drinks. Seventy Three percent of students rode their motorcycles with the speed of more than 50 kilometer per hour. Only 22.8 percent of students worn helmet every time when riding their motorcycles.

2. Eighty six percent of accidents caused minor injuries; however, there were 2 percent of students with organ loss. About 64 percent of students with accidents were cured in University health care unit.

3. The difference of knowledge on safe riding between the study group and the control group was statistically significant ($p = 0.015$). However, most of both groups had the knowledge on safe riding at medium to poor levels. Only 3 percent of study group and 6.9 percent of control group had knowledge on safe riding at high level.

4. The attitude on safe riding between the study group and the control group was not different. Both of them had positive attitude on safe riding. The percentage of positive attitude on safe riding in study group and control group were 97 percent and 95 percent, respectively.

5. The safe riding behaviors between the study group and the control group were not different. The percentage of safe riding in study group and control group were only 44.6 percent and 53.5 percent, respectively.

6. The factor related to motorcycle accidents was motorcycle modification. The study group had consistently 3.37 times higher risk of motorcycle accidents than the control group ($p = 0.001$). Moreover, the knowledge on safe riding was a significant factor that reduced the risk of motorcycle accidents ($p = 0.044$).