THE AWARENESS AND BEHAVIOR OF USING HELMET OF MOTORCYCLE RIDERS IN THAILAND

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Abstract - The study of the awareness and behavior of using helmet of the motorcycle riders in Thailand aimed to study the level of awareness of wearing helmet of the motorcycle drivers in Thailand, and to study the behavior of wearing helmet of the motorcycle riders. Moreover, to study the risk factors that had relationship with the behavior of wearing helmet of the riders. The population were the motorcycle riders all the regions in Thailand. The sample were 1,033 riders. The results indicated different levels of awareness which depended on many factors. There were significant relationship between awareness level and demographic backgrounds of the riders.

Key words - Awareness, Helmet, Motorcycle riders, Risk factors

I. INTRODUCTION

From the safety report on the road, the world health organization reported that the death of Thai people on the road mostly came from motorcycle when compared to other vehicles [1]. The Road Safety Watch reported that In Thailand, people died from road accidents at the second top rank in the world [2]. They found that motorcycle drivers wore helmet only 43%, which was low rating. While the registers for buying and to be the owners of motorcycles were increased. Many related organizations had come to concern, and worried that the accidents might be increased. That was why this topic came to be important to study.

A. Objectives of the study

The objectives of the study were as follows:
(1) To study the level of awareness of wearing helmet of the motorcycle drivers in Thailand.
(2) To study the behavior of wearing helmet of the motorcycle drivers in Thailand.
(3) To study the risk factors that had relationship with the behavior of wearing helmet of the drivers.

B. Significance of the study

The results of the study would be useful for preparing the guidelines for the related organizations to force or stimulus the motorcycle drivers to wear helmet every time when they were riding motorcycles in Thailand.

II. METHODOLOGY

The population of the study were the motorcycle riders in Thailand who had rider license and had riding experience at least one year. Sample riders were selected from three provinces that had highest registered rate in each region, totally 1,033 riders. The tools were questionnaires those passed the process of evaluating for validity and reliability.
The study of behavior of waring helmet was adjusted from the concept of consumer behavior [3].
Data were analyzed by using descriptive statistics and testing hypotheses by using inferential statistics. The results of the study were illustrated below.

III. RESULTS

A. The results of awareness

The results indicated that the riders had highest awareness when:
1. When they felt of safety
2. When they thought that without helmet had chance to get more accidents.
3. When they thought that the riders without helmets had chance to die more than the one who wore helmet.
4. When they thought of handicaps caused by not waring helmet.

The results indicated that the riders had high awareness when:
1. When they thought that effective helmet could protect accidents.
2. When they thought of head accidents when without helmets.
3. When the government agencies had campaign to ware helmets.
4. When they got information from government

The results indicated that the riders had moderate level of awareness when:
1. When they found the announcement.
2. When they ride slowly.
3. When they felt that they had more experience.
4. When they felt uncomfortable.
5. When they worried about their hair styles.
6. When they went to near places.

7. When they felt painful.

The results indicated that there were relationship between gender, age, career, income, educational level, and riding experience with the level of awareness.

Female had higher awareness than male.
Riders who had age more than 30 years old had higher awareness than other ages. May be because these range of age were working people. They had a lot of responsibilities.

Table 1 personal data of the motorcycle riders

Data for using motorcycle of Thai riders				
① Owner/Not owner of motorcycle			n	%
1. Owner			645	62.44
2. Not owner			388	37.56
② Number of persons ride on a pillion			n	%
1. No person ride on a pillion			444	42.98
2. Had person ride on a pillion			589	57.02
Average number of persons ride on a pillion= 1.23 persons (SD= 0.53) Min = 1 person Max=4 persons				
③ Riding experience	Mean	SD	Min	Max
Number of years	8.12	7.50	1	50
④ History of having accident and enter into hospital			n	%
1. Had accident			754	72.99
2. Never			279	27.01
Average of having accident 1.54 times (SD= 0.75) Min = 1 time Max= 4 times				
⑤ Size (CC) of motorcycle			n	%
1. < 100 CC			58	5.61
2. 100 CC			165	15.97
3. 110 CC			364	35.24
4. 125 CC			380	36.79
5. > 125 CC			66	6.39

Table 1 indicated that most of the riders were the owners of motorcycles. May be because of the price of motorcycle was cheaper than having a car. Most of people were able to own them. They had person ride on a pillion more than riding alone. Average number of persons ride on a pillion=1.23 persons (SD= 0.53) Min = 1 person Max=4 persons. Most of them used to have accidents. Average of having accident= 1.54 times (SD=0.75) Min = 1 time Max= 4 times. The most popular size of motorcycles were 125 CC, 110 CC, and 100 CC respectively.

Table 2 Behavior of riding motorcycle

Behavior of riding motorcycle		
① Objectives of driving motorcycle	n	%
1. Sending family member	159	15.39
2. Go to study/Work	660	63.89
3. Using for job	135	13.07
4. Others	79	7.65

② Distance of riding in 1 day	n	%
1. < 1 kilometer	67	6.49
2. 1- 2 kilometers	235	22.75
3. 2 – 5 kilometers	325	31.46
4. > 5 kilometers.	406	39.30
③ Speed per hour	n	%
1. <30 kilometer/ hour	84	8.13
2. 30 - 60 kilometers/ hour	579	56.05
3. 61 - 90 kilometers/ hour	288	27.88
4. > 90 kilometers/ hour	82	7.94
④ Area of normal riding	n	%
1. Big road	480	46.47
2. Small road	373	36.11
3. Alley	180	17.42
⑤ Own character	n	%
1. Not impulsive	504	48.79
2. Impulsive	529	51.21

Table 2 indicated behavior of riding motorcycle of the Thai riders. Objectives of riding motorcycle were going to study or going to work, sending the members of the family, and using for job respectively. Actually, it saved cost when using motorcycles. The distance of riding in 1 day was mostly more than 5 kilometers, with the speed 30 - 60 kilometers/ hour.
Usually, they ride on big roads, and small road, and alley respectively.

Table 3 below indicated behavior of using helmet. Most of riders have their own helmet. May be because the helmet was for personal use and it was not so expensive. They prefer full type of helmet than other types. Half of them had experience of cashing by the polish at least one time.
Table 4 indicated behavior of wearing helmet under conditions. The conditions that most of them wore helmet every time were:
1. When it was raining.
2. When they were drinking alcohol.
3. When they were seeing the checkpoint that had police.
4. When they were on big roads.

Table 3 Behavior of using helmet

Behavior of using helmet		
① Owner of helmet	n	%
1. owner	890	86.16
2. not owner	143	13.84
② Type of helmet	n	%
1. Cover face	327	31.66
2. Full	437	42.30
3. Half	269	26.04

History of cashing by police	n	%
1. yes	597	57.79
2. no	436	42.21
2.1 yes 1 time	176	40.37
2.2 yes 2 times	102	23.39
2.3 yes 3 times	31	7.11
2.4 yes, more than 3 times	127	29.13

Table 4 Behavior of wearing helmet under conditions

① Behavior of wearing helmet under conditions		
1.1 Raining	n	%
1. Not wear	51	4.94
2. Wear sometimes	248	24.01
3. Wear every time	734	71.06
1.2 Drinking alcohol	n	%
1. Not wear	144	13.94
2. Wear sometimes	295	28.56
3. Wear every time	594	57.50
1.3 Seeing checkpoint	n	%
1. Not wear	27	2.61
2. Wear sometimes	105	10.16
3. Wear every times	901	87.22
1.4 On big road	n	%
1. Not wear	35	3.39
2. Wear sometimes	239	23.14
3. Wear every time	759	73.48

SUGGESTION

Suggestion from the results

1. It was founded they had highest awareness when they felt of safety, when they thought that without helmet had chance to get more accidents, when they thought that the riders without helmets had chance to die more than the one who wore helmet, when they thought of handicaps caused by riding without waring helmet. So, the government should show these pictures about accidents, handicaps to promote the campaign of using helmets.
2. It was found that the popular type of helmet was full type, and the popular size of motorcycle was 125 CC, so for commercial the businessmen could have the idea to bring to sell in the markets.
3. It was found that female had higher awareness than male. So, the government agency, should focus on male than female.

Suggestion for further research

The future research should use qualitative approach and also study in selected area that has high accidents.

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