

# Coverage of Public Reimbursement Scheme for Traffic Accident Victims in Thailand

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## Abstract

Traffic injury is a major threat to public health. Loss of lives and property due to traffic accidents raise concern not only among the public but also the government. As a result, the Motor Vehicle Accident Victim Protection Act was enacted in order to provide compensation for traffic accident victims and their relatives in 1992. Three years after the Accident Victim Protection Act came into effect, this study, through telephone survey, revealed that less than 10 per cent of traffic accident victims were reimbursed for medical care cost by the law. The process of reimbursement was found to be cumbersome. In addition, only 18 per cent of motor vehicles were found holding insurance policies as required by the law.

Of all accidents in Thailand, motor vehicle accidents are the biggest killer. Within 9 years (1983-1991) traffic injury increased by 60 per cent, from 170 per 100,000 population to 270 per 100,000 population. Similarly, the death toll from traffic injury increased by 38 per cent during the 10-year period from 13 per 100,000 population in 1982 to 18 per 100,000 population in 1991<sup>(1)</sup>. Men were involved 4 times more often than women<sup>(1)</sup>.

In order to compensate for medical care cost and loss of lives and property, the Motor Vehicle Accident Victim Protection Act was enacted and came into effect on October 1, 1992<sup>(2)</sup>.

It also aims at having car owners share responsibility in providing compensation to the victims and their families by paying an annual premium. Private insurance firms are required by the law to help shoulder the cost of compensation by collecting premiums and processing claims without earning profit. Medical care facilities are guaranteed reimbursement by the law for providing medical care to the victims. In order to safeguard against failure to get reimbursement from private insurance companies, the Office for Motor Vehicle Accident Victim Protection was set up and financed by a subsidy from a government budget and part of the premium.

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This study was undertaken to assess coverage of compensation for medical care by the law. It also addresses the question about the percentage of car owners paying the premium required by the law.

## MATERIAL AND METHOD

The first objective was addressed through a telephone survey on 258 subjects who fell victim to motor vehicle accidents or who were the victims' relatives or friends providing proxy report. They were randomly picked from a list of 3,223 traffic injury patients who attended hospitals in Bangkok Metropolis from 1 October 1994 to 30 April 1995. The list was obtained from 10 participating hospitals. Two of them were private hospitals and the rest were public hospitals. The interview with each subject took about 10 minutes. Key variables included in the interview were demographic profile of the victims, types of benefit, results of claim, mode of transfer to hospitals, hospital charges, and knowledge about the scheme. In this article, only those results related to the first objective were presented.

In order to address the second objective, the number of insurance policies required by the law was obtained from the Office of Insurance Registrar, Department of Insurance, Ministry of Commerce<sup>(5)</sup>. The number of registered motor vehicles was obtained from the Department of Land Transport, Ministry of Communication and Transport<sup>(7)</sup>.

## RESULTS

One hundred and forty seven (57%) of 258 interviewees were traffic injury victims. The rest were relatives, friends or their employers. Mean age of the victims was 32 years and 52 per cent were males (Table 1).

Out of 258 cases, only 20 cases or 8 per cent managed to receive claim according to the law. We asked about experiences in making claims to all sources of benefit. The answers are shown in Table 2. Compared to those claiming on other sources, a much lower proportion of subjects who claimed according to the law experienced convenient service. Fifty one per cent reported that they received reimbursement within 20 days.

Hospital bills cost 1,097 baht on average for out-patient care and 28,458 baht for in-patient care. Half of the outpatients paid 600 baht or

**Table 1. Demographic profiles of subjects.**

Age (Mean, SD)	32.7 ± 12.5
Sex (male : female)	1.08 : 1
Residence (Bangkok : others)	4.4 : 1
Occupation	N (%)
Private employee	102 (39.8)
Government/quasi government employee	48 (18.8)
Student	36 (14.1)
Self employed	29 (11.3)
Housewife	28 (10.9)
Others	13 (5.1)

**Table 2. Type of benefit and readiness of reimbursement.**

Type	Convenient (%)	N (%)
Government	81.8	22 (100)
Employer	91.3	23 (100)
Private insurance	87.5	8 (100)
The Act	7.7	13 (100)
Social security	50.0	2 (100)
Others	40.0	5 (100)

**Table 3. Hospital charge by type of services.**

Charge	Outpatients 123 cases	Inpatients 67 cases
Mean	1,096.9	28,458.3
SD	1,355.1	33,233.5
Min	40.0	500.0
Max	9,000.0	170,000.0
Median	600.0	20,000.0
Percentile 25	350.0	8,000.0
Percentile 75	1,000.0	40,000.0

**Table 4. Sources of knowledge about the Act.**

Sources	N	%
Media	53	57.6
Insurance firms	20	21.7
Policemen	1	1.1
Hospitals	1	1.1
Others	17	18.5
Total	92	100.0

more for hospital bills. The figure was 20,000 baht or more for hospitalization (Table 3). Of particular concern was that hospital bills for 60 per cent of inpatients cost over 10,000 baht.

It was found that only 37 per cent of respondents knew about the law. The majority (58%) of them were informed by the media (Table 4). However, misunderstanding about the law was found among 70 per cent of those who thought they knew something about the law.

The number of insurance policies was 4,184,554 during the period from 1 January 1994 to 31 December 1994. The cumulative number of registered motor vehicles during the same period was 12,535,887. The first figure was divided by the second figure to give the proportion of motor vehicles with the insurance policy of 33.4 per cent. Breakdown of the proportion by types of vehicles resulted in 17.7 per cent for motorcycles, 29.2 per cent for three-wheeled motor vehicles, 78.0 per cent for passenger cars with less than 8 seats, 88.5 per cent for passenger cars with 8 seats or more, 49.5 per cent for trucks, 5.9 per cent for vehicles used in agriculture and 77.1 per cent for other vehicles.

## DISCUSSION

Three years after the law came into effect, it was found by this study that hospital bills of only 8 per cent of traffic accident victims were covered by the law. Survey of provincial and regional hospitals by Saedthabut et al in 1994 revealed a similar finding i.e., 3 per cent of coverage<sup>(6)</sup>. Although the results from both studies are not identical, they do point to the same direction i.e. the Motor Vehicle Accident Victim Protection Act failed to protect the majority of people it aims to protect. Two reasons could explain this tragedy. Firstly, it was a result of complicated and time consuming procedures in reimbursement of hospital bills created by private insurance companies and the Office for Motor Vehicle Accident Victim Protection, Ministry of Commerce. Evidence supporting the first reason came from consistent complaints from representatives of both private and public hospitals attending a round table discussion organised on 29th August, 1995 by the Office for Health Insurance, Ministry of Public Health. According to those representatives, several documents beyond the scope of the law were required by those agencies in the reimbursement procedure such as chassis

number, engine number. It is also evident from this study and the other study<sup>(4)</sup> that the average duration of reimbursement clearly exceeded the maximum limit (7 days) defined by the law. Secondly, this survey demonstrates that very few of the subjects were knowledgeable about the benefits offered by the law. In order to remedy the situation, the following measures are suggested. Hospitals, especially those of the public sector, the biggest care takers for traffic accident victims, should be granted an adequate amount of funding on a pre-paid fee-for-service basis so that they can improve their services with greater financial flexibility. This measure will effectively bypass the red tape in both private insurance companies and the Office. However, it could raise concern about moral hazard practice and lead to excessive use of resources. To avoid this undesirable consequence, a medical audit and peer review mechanism could be set up to closely monitor hospital care. The mechanism to monitor and evaluate performance of private insurance companies should be strengthened. Thai Insurance Datanet, a computerised database set up by the Association of Private Insurance Companies, should be developed to its full capacity in order to be used as a monitoring tool. In part, claims were processed by the Office for Motor Vehicle Accident Victim Protection, Ministry of Commerce, whose performance was regulated by bureaucratic red tape. Modification of rules and regulations are thus needed to facilitate functioning of this agency. Finally, public information and education as to benefits of the law should be strengthened. Since victims and their relatives or friends come to the hospital at a time when concern about this issue is at the highest level, hospital is considered to be an effective channel for the information and education programme.

It was found that cost of hospital bills for 60 per cent of hospitalized cases exceeded the 10,000 baht ceiling<sup>(2)</sup>. This could jeopardize medical care for patients who are in desperate need, especially for those under private hospital care. As a result, we suggest the 10,000 baht ceiling should be reconsidered if the current mechanism in processing claims is allowed to operate. In the Republic of South Korea, according to the Automobile Liability Security Act of 1963, injury benefit ranges from 100,000 Won (33,000 baht) for severity grade 14 to 6,000,000 Won (1,980,000 baht)<sup>(8)</sup>, and claims are processed under the no-

fault system<sup>(8)</sup>. In addition to the aforementioned problems with beneficiaries, the law also failed to enforce the majority of car owners to buy insurance policies. Under the principle of risk sharing, this failure leads to increased burden on those limited number of payers who complied. Close collaboration between the Department of Insurance and the Department of Land Transport in setting up a system to facilitate car owners to simultaneously pay the premium and fee for renewal of car registration could help increase compliance to the law. Car owners should be educated about their important

contributions to public welfare stipulated by the law.

#### ACKNOWLEDGEMENT

The authors wish to thank Dr.Sguan Nitayarampong, Dr.Chanpen Choprapawan and Dr. Viroj Tangchareonsatien for their comments and ideas on this article. We also wish to thank Mrs. Komkai Tusaranond and Mr. Saroungkarn Hoamdee for provision of important data. This study was funded by the Health System Research Institute and the Thailand Health Research Institute.

(Received for publication on June 12, 1996)

#### REFERENCES

1. Santikarn C, Kumnark kaew K. Motor vehicle accident situation in Thailand 2530-2534 BE. Division of Epidemiology. Office of the Permanent Secretary. Ministry of Public Health 1994: 8-17.
2. Ministry of Commerce. Motor vehicle accident victim protection act 2535 BE. Royal Gazette, special volume 110, No. 142, September 22, 2536 BE. Ministry of Commerce. Department of Insurance 1993: 27.
3. Department of Land Transport. Statistics on number of registered vehicles at 31 December 2537 BE. Division of Technical Support and Planning. Department of Land Transport 1996: 111-3.
4. Nittayarampong S. A report on Motor Vehicle Accident Victim Protection Act : Whom is protected? A report to a round table discussion seminar on Motor Vehicle Accident Victim Protection Act: Whom being protected? August 29, 2538 BE. Office of the Permanent Secretary. Ministry of Public Health.
5. of Public Health. Department of Insurance. A report on car insurance according to Motor Vehicle Accident Victim Protection Act for the year 2538 BE. Office of Insurance Registrar. Department of Insurance 1996.
6. Saedthabut M. An analysis of financial burden to provincial and regional hospitals in providing care for motor vehicle accident victims. A report to a round table discussion seminar on Motor Vehicle Accident Victim. Protection Act : Whom being protected? August 29, 2538 BE. Office of the Permanent Secretary. Ministry of Public Health.
7. Department of Land Transport. Number of vehicles registered under the Motor Vehicle Law from the year 2523-2532 BE. and projection until 2537 BE. Department of Land Transport. Technical and Planning Division 199: 111-3.
8. Kulsiri P. Automobile insurance in the Republic of South Korea. Insurance Journal 1994; 2: 31-5.

## ความครอบคลุมของพระราชบัญญัติคุ้มครองผู้ประสบภัยจากรถ

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เพื่อบรรเทาและลดเชยความสูญเสียชีวิตและทรัพย์สินอันเนื่องจากอุบัติภัยyanยนต์ อันเป็นสาเหตุการตายที่สำคัญของคนไทยคุณนี้ รัฐบาลจึงออกกฎหมายบังคับให้เจ้าของยานยนต์ต้องจ่ายเบี้ยประกันเพื่อนำรายได้มาจ่ายค่าชดเชยความเสียหายต่อร่างกาย และชีวิตของผู้ประสบภัยจากรถ กฎหมายนี้มีผลบังคับใช้ตั้งแต่ พ.ศ.2535 มีกำหนดว่าแห่งที่ริบผู้ประสบภัยจากรถได้รับประโยชน์จากการบังคับใช้กฎหมายฉบับนี้เพียงได้ การวิจัยนี้มุ่งตอบคำถามดังกล่าวโดยอาศัยการสัมภาษณ์ทางโทรศัพท์ พบว่าไม่ถึงห้อยละ 10 ของผู้ประสบภัยที่เข้ารับการรักษาในรพ.ในเขตกรุงเทพฯได้รับการชดเชยค่ารักษาพยาบาลเบื้องต้น อันสืบเนื่องจากขั้นตอนการเบิกจ่ายที่ยุ่งยากขับช้อน กินเวลานาน นอกจากนี้ยังพบว่าเพียงร้อยละ 33 ของยานยนต์ที่จดทะเบียนจ่ายเบี้ยประกันตามที่กฎหมายกำหนด สะท้อนให้เห็นเด่นชัดว่าความคุ้มครองของกฎหมายฉบับนี้ยังไม่น่าพอใจและการบังคับให้เจ้าของยานยนต์จ่ายเบี้ยประกันยังอยู่ในระดับต่ำมาก

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