

# Epidemiology of Assault-Related Hospitalizations in Thailand in the Fiscal Year 2010: Comparison between With and Without Psychiatric Disorder

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**Background:** Assault is a leading cause of injury and death; however, little is known regarding the psychiatric epidemiology of assault-related hospitalizations (ARH) in Thailand.

**Objective:** To analyze the epidemiological data of ARH in Thailand for the fiscal year 2010 and to compare the epidemiology of ARH between with and without psychiatric disorder.

**Material and Method:** The data analyzed were from the annual reports for the fiscal year 2010 (October 1, 2009-September 30, 2010), on every kind of hospitalization reimbursed by the Universal Health Coverage System, the Social Welfare System, and the Civil Servant Medical Benefits Scheme, altogether provided medical coverage for more than 96% of the Thai population. The information on ARH (X85-Y09: ICD-10 version for 2010) and comorbid psychiatric disorder(s) (F00-F99) were extracted. Number of in-patient hospitalizations by sex, age, geographical region, month, hospital charges, length of hospital stay (LOS) and mortality rate (MR) were analyzed. Frequencies (percentages) of ARH and subgroups were reported.

**Results:** The national ARH care cost was 0.98% of the overall national in-patient care expenses (88,964 million Baht). The rate of ARH was 0.72 of every 100 hospitalizations or 7.74 incidents/100,000 general population. Assaults leading to hospitalizations frequently occurred among males (80.86%); in 25-39 year-olds (35.60%), 40-59 year-olds (22.85%); by sharp object (29.44%), blunt object (24.40%) and bodily force (23.71%); in the Central (39.48%) and Northeast region (31.16%). There was a tri-modal monthly peak distribution: April (11.12%), December (9.45%) and October (8.90%). A minority i.e. 0.4% (male to female ratio of 4.22:1) of ARH had a concomitant psychiatric disorder(s): the most frequent being 'mental and behavioral disorders due to psychoactive substance use' (66.54%) followed by 'schizophrenia, schizotypal and delusional disorders' (14.23%). The MR of ARH with and without concomitant psychiatric disorder was 1.03% and 0.30%, respectively. The LOS of overall ARH was  $5.15 \pm 12.41$  days, min-max was 1-568 days and the mode was 1 day. The LOS of ARH with/without psychiatric disorder was  $5.2 \pm 12.4$  vs.  $3.7 \pm 7.5$  days. The expenses paid for ARH with/without psychiatric disorder was 75,811,383.40 Baht vs. 791,214,659.90 Baht.

**Conclusion:** Assault accounted for 0.72 hospitalization of every 100 hospitalizations and 7.74 times/100,000 population. A fraction (0.04%) of ARH had concomitant psychiatric disorder(s): most frequently psychoactive substance use disorders followed by schizophrenia and related psychosis.

**Keywords:** Psychiatric epidemiology, Assault, Hospitalization

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Assault is a leading cause of preventable injury<sup>(1)</sup> and death and a challenging global public health issue<sup>(2)</sup>. Estimation of the incidence of assault-related hospitalizations is an essential step toward preventing this health problem. From National Injury Surveillance (NIS) for Thailand 2009, assault was the

fifth leading cause of injuries (289.16 per 100,000 general population) and was the second most frequent cause of death (4.19 persons per 100,000 general population), but these data was from NIS which contained only 28 hospitals<sup>(3)</sup>. The availability of Thai nationwide administrative databases means an existing large enough data that can be analyzed for trends, which would be useful for medical education and healthcare service provision. Discharge diagnosis from hospital admission was based on the diagnoses of professional physicians, making the incidence much more reliable<sup>(4)</sup>.

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The present study aimed to study the epidemiology of assault-related hospitalizations (ARH) and to compare the epidemiology of ARH between with and without psychiatric disorder from the discharge diagnosis using nationwide hospital records.

### Material and Method

The present study was a part of the principal project "Health Situation Analysis of Thai People 2010: Implications for Health Education and Health Service Reform". The Ethics Committee of Khon Kaen University endorsed the principal project (HE 541036). The materials for analysis were in-patient data in the fiscal year 2010 (October 1, 2009-September 30, 2010) from the Universal Health Coverage System, the Social Welfare System and the Civil Servant Medical Benefits Scheme, altogether provided insurance coverage for over 96% of the Thai population.

The information on assault: X85-Y09 and concurrent psychiatric disorder: F00-F99 (according to ICD-10 version for 2010) were extracted and analyzed for number of in-patient hospitalizations. The data were sub-grouped by age, sex, geographical region, month, mortality rate (MR), length of hospital stay (LOS) and hospital charges in order to gain the maximum information for revisions to medical education and health service provision.

Coding classification for ICD-10 for assault and concomitant psychiatric disorder(s)<sup>(4)</sup> were detailed in Table 1. The codes were used instead of the full name throughout this report.

The SPSS version 17 statistical software was used for statistical analysis. Frequencies (percentages) of assault-related hospitalizations and their sub-groups are herein reported.

### Results

The number of hospitalizations in the present study should be understood as the number of times except where specified. Of the total 6,880,815 hospitalizations in the fiscal year 2010, 49,443 (0.72%) were related to assault, of which 40,129 (81.16%) were males. The assaults were by sharp objects (X99) 14,608 times (29.44%), blunt objects (Y00) 12,110 times (24.40%), bodily force (Y04) 11,766 times (23.71%), other and unspecified firearm discharge (X95) 4,358 times (8.78%), unspecified means (Y09) 3,311 times (6.67%) and handgun discharge (X93) 1,037 times (2.10%), respectively. Among the male victims, the most frequent hospitalizations were from X99 (13,418 times; 33.44%), followed by Y00 (9,929 times; 24.74%), Y04 (7,716 times;

19.23%), X95 (4,012 times; 10.00%) and Y09 (2,764 times; 6.89%). By comparison, the most frequent hospitalizations among females were from Y04 (4,050 times; 42.64%), followed by Y00 (2,181 times; 22.96%), X99 (1,190 times; 12.53%), Y09 (547 times; 5.76%) and sexual assault by bodily force (Y05) (416 times; 4.38%) (Fig. 1). ARH by age groups were 25-39 year-olds (17,668 times; 35.73%), 40-59 year-olds (11,156 times; 22.56%), 19-24 year-olds (10,869 times; 21.98%), 13-18 year-olds (7,097 times; 14.35%), and 60-69 year-olds (1,242 times; 2.51%). The death rate of all ARH was 657 of 49,443 deaths (1.33%). The most frequent method of assault that led to death was: X95 (191 death; 29.07%), X99 (146 deaths; 22.22%), Y00 (105 deaths; 15.98%), Y04 (66 deaths; 10.05%), and Y09 (57 deaths; 8.68%). The top five mortality rates in descending order by age group were persons in the age group of 0-1 years old (3 deaths; 3.80%), 70-79 years old (19 deaths; 3.14%), 40-59 years old (207 deaths; 1.86%), 60-69 years old (20 deaths; 1.61%) and 25-39 years old (206 deaths; 1.17%) (Table 2).

Of the 49,443 ARH, 2,000 (0.4%) had concomitant psychiatric disorders; of which 1,937 (96.85%), 59 (2.95%), 4 (0.2%) had a single, double and triple disorder(s) respectively. The male to female ratio of the total 2,000 cases was 4.22:1. The most frequent concomitant psychiatric disorders were: (1) 'mental and behavioral disorders due to psychoactive substance use' (F10-F19) 1,384 times (66.54%); (2) 'schizophrenia, schizotypal and delusional disorders' (F20-F29) 296 times (14.23%); (3) 'neurotic, stress-related and somatoform disorders' (F40-F48) 169 times (8.13%); and (4) 'mood disorders' (F30-F39) 135 times (6.49%), respectively. All age groups had this similar pattern of concomitant psychiatric disorders. Males constituted a preponderance of the cases with a psychiatric disorder. The frequency of psychiatric disorders differed between males and females. The most common psychiatric disorders for males were: (1) F10-F19 1,211 times (76.84%); (2) F20-F29 237 times (15.00%); (3) F00-F09 43 times (2.73%); (4) F40-F48 39 times (2.47%) and (5) F30-F39 27 times (1.71%). By comparison, the most common concomitant psychiatric disorders for females were: (1) F10-F19 173 times (34.3%); (2) F40-F48 130 times (25.8%); (3) F30-F39 108 times (21.40%); (4) F20-F29 59 times (11.7%); and (5) F70-F79 14 times (2.78%). The most common assaults in descending order among those with concomitant psychiatric disorders were: (1) Y04 (663 times; 32.94%); (2) Y00 (576; 28.61%); (3) X99 (359; 17.83%); (4) Y09 (221; 10.98%) and (5) Y04 (43; 2.14%).

**Table 1.** ICD-10 coding classification of assaults and psychiatric disorders

Classification	Code	Category
Assaults	X85	Assault by drugs, medicaments and biological substances
	X86	Assault by corrosive substance
	X87	Assault by pesticides
	X88	Intentional self-harm by gases and vapours
	X89	Assault by other specified chemicals and noxious substances
	X90	Assault by unspecified chemical or noxious substances
	X91	Assault by hanging, strangulation and suffocation
	X92	Assault by drowning and submersion
	X93	Assault by handgun discharge
	X94	Assault by rifle, shotgun and larger firearm discharge
	X95	Assault by other and unspecified firearm discharge
	X96	Assault by explosive material
	X97	Assault by smoke, fire and flames
	X98	Assault by steam, hot vapours and hot objects
	X99	Assault by sharp object
	Y00	Assault by blunt object
	Y01	Assault by pushing from high place
	Y02	Assault by pushing or placing victim before moving object
	Y03	Assault by crashing of motor vehicle
	Y04	Assault by bodily force
Y05	Sexual assault by bodily force	
Y06	Neglect and abandonment	
Y07	Other maltreatment syndromes	
Y08	Assault by other specified means	
Y09	Assault by unspecified means	
Psychiatric disorders	F00-F09	Organic, including symptomatic, mental disorders
	F10-F19	Mental and behavioral disorders due to psychoactive substance use
	F20-F29	Schizophrenia, schizotypal and delusional disorders
	F30-F39	Mood (affective) disorders
	F40-F48	Neurotic, stress-related and somatoform disorders
	F50-F59	Behavioral syndromes associated with physiological disturbances and physical factors
	F60-F69	Disorders of adult personality and behavior
	F70-F79	Mental retardation
	F80-F89	Disorders of psychological development
	F90-F98	Behavioral and emotional disorders with onset usually occurring in childhood and adolescence

**Table 2.** Assault means in association with death by age group

ARH	Numbers of death in each age-group (year old)										Total (times)
	0-1	1-5	6-12	13-18	19-24	25-39	40-59	60-69	70-79	80+	
ARH by age group (include death)	79	223	503	7,097	10,869	17,668	11,156	1,242	606	0	49,443
Numbers of death	3	2	4	75	124	205	207	20	19	0	657

Hospitalizations of assaulted victims by region of Thailand were: 19,594 times (39.48%) in the Central region, followed by 15,465 times (31.16%) in the Northeast; 7,873 times (15.86%) in the North and

6,696 times (13.49%) in the South. The five most frequent means of assault in each region are presented in Table 4.

Males had the highest number of assault-

**Table 3.** Concomitant psychiatric disorder(s) and number of assault-related hospitalizations

Concomitant Psychiatric Disorder(s)		Number of Assault-Related Hospitalization
Single disorder	F00-F09	41
	F10-F19	1,332
	F20-F29	263
	F30-F39	114
	F40-F48	156
	F50-F59	2
	F60-F69	4
	F70-F79	18
	F80-F89	2
	F90-F98	5
Two disorders	(F00-F09) + (F10-F19)	7
	(F00-F09) + (F20-F29)	1
	(F00-F09) + (F30-F39)	2
	(F00-F09) + (F40-F48)	1
	(F10-F19) + (F20-F29)	22
	(F10-F19) + (F30-F39)	9
	(F10-F19) + (F40-F48)	3
	(F10-F19) + (F60-F69)	1
	(F10-F19) + (F70-F79)	1
	(F20-F29) + (F30-F39)	4
	(F20-F29) + (F50-F59)	1
	(F20-F29) + (F70-F79)	2
	(F30-F39) + (F40-F48)	3
(F40-F48) + (F50-F59)	2	
Three disorders	(F00-F09) + (F10-F19) + (F20-F29)	1
	(F00-F09) + (F10-F19) + (F40-F48)	1
	(F00-F09) + (F20-F29) + (F70-F79)	1
	(F20-F29) + (F30-F39) + (F40-F48)	1

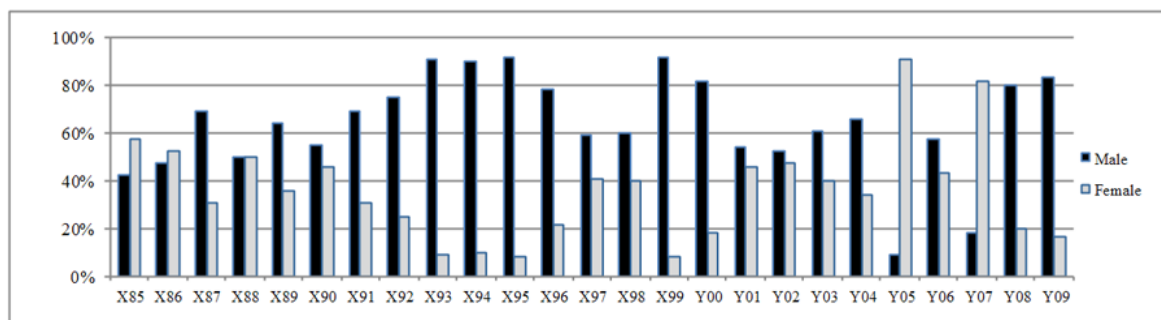
**Table 4.** Top five means of assault leading to hospitalizations by region of Thailand

Region	Assault means/No./percent				
Central	X99/6,194/31.61%	Y00/4,818/24.59%	Y04/4,367/22.29%	Y09/1,508/7.70%	X95/1,335/6.81%
Northeast	X99/4,248/27.47%	Y04/4,123/26.66%	Y00/4,111/26.58%	X95/1,019/6.59%	Y09/999/6.46%
Northern	Y04/2,218/28.17%	X99/1,951/24.78%	Y00/1,935/24.58%	X95/676/8.59%	Y09/607/7.71%
Southern	X99/2,215/33.08%	X95/1328/19.83%	Y00/1,246/18.61%	Y04/1,058/15.80%	X96/200/2.99

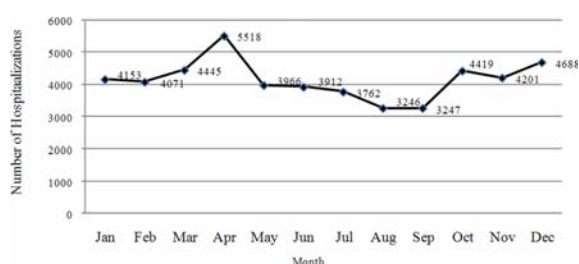
related hospitalizations in every regions. For assaulted male: in the Central region and the North, 25-39 year-olds were predominated, followed by 40-59 and 19-24 year-olds. In the Northeast and the South, 19-24 and 40-59 year-olds were predominated. In contrast, among females, 25-39 year-olds had the highest number of hospitalizations in the Central region and the South whereas 40-59 year-olds were predominated in the North and Northeast. F10-F19 was the major psychiatric diagnosis among ARH in all regions. The second and the third most frequent psychiatric diagnosis varied

somewhat among regions, namely: F20-F29 and F40-F48 in the Northeast and Central regions; F30-F39 and F20-F29 in the North; and F40-F48 and F20-F29 in the South.

The highest monthly rate of ARH demonstrated a trimodal distribution: the three peak rates were in April (5,518; 11.12%), December (4,688; 9.45%) and October (4,419; 8.90%) (Fig. 2). The trimodal monthly rate also found in: (a) type of assault, (b) concomitant psychiatric diagnoses and (c) males.



**Fig. 1** Percentage of ARH by means of assault and sex



**Fig. 2** Number of assault-related hospitalizations by month

The length of hospital stay (LOS) among ARH was  $5.15 \pm 12.41$  days (range from 1-568 days, mode 1 day). Most of the victims were hospitalized for only 1 day. The average longest LOS were from: (1) X97 ( $25.84 \pm 28.31$  days, range from 1-143 days, mode 7 days); (2) Y06 ( $21.54 \pm 68.70$  days, range from 1-405 days, mode 1 day); and (3) X86 ( $12.85 \pm 26.19$  days, range from 1-180 days, mode 1 day).

The LOS of victims with a psychiatric disorder was longer than those without ( $5.2 \pm 12.4$  vs.  $3.7 \pm 7.5$  days respectively). Persons with F20-F29 had the longest hospital stays ( $12.73 \pm 25.86$  days), followed by F00-F09 ( $8.25 \pm 9.38$  days) and F70-F79 ( $7.86 \pm 14.03$  days).

The mortality rate of ARH with and without concomitant psychiatric disorder was 1.03% and 0.30%, respectively. The national expenses for assault in-patient care were 867 million Baht or 0.98% of the grand total 88,964 million Baht. The expenses paid for ARH with vs. without any psychiatric disorder was 75,811,383.40 vs. 791,214,659.90 Baht.

## Discussion

Although the national expense for caring assault-related in-patients constituted only 0.98% of the total expenses for all in-patients, however, assault

is a preventable condition. ARH occurred 0.72 times for every 100 hospitalizations or 7.74 times/100,000 general population (the Thai population was 63,878,267 in the fiscal year 2010<sup>(6)</sup>). Assault leading to hospitalization most frequently occurred among: males; 25-39 year-olds; in Central Thailand; in April, October and December; from a sharp object, blunt object and bodily force; and without a psychiatric condition. Williams et al also found that males 25-44 years of age were most likely to be hospitalized for assault but in their study assault was usually by a blunt object<sup>(7)</sup>. Peak monthly incidence of ARH may reflect months in which cultural/seasonal events occurred (thereby leading to crowded environments and substance use) and/or biological factors affecting impulse control<sup>(8,9)</sup>.

Among psychiatric patients assaulted and hospitalized, the most frequent diagnosis was 'mental and behavioral disorders due to psychoactive substance use'. Assaults among adolescent victims, either male or female, usually occurred during substance or alcohol use and/or weapon carrying<sup>(10)</sup>. Female victims who were younger and drinking prior to assault were more likely than those who were not drinking and more often attacked by a stranger who was also drinking<sup>(11)</sup>. Alcohol, marijuana and prescription drug use were significantly associated with non-partner violent assault<sup>(12)</sup>. The psychiatric disorder cluster 'schizophrenia, schizotypal and delusional disorders' was the second most frequent association in ARH, but its absolute frequency was significantly low.

The present study found that the youngest age of assault victims was less than one year. Various issues impact the likelihood that a little child might be assaulted, including: (a) the parental characteristics (literacy, age, educational level, knowledge and awareness of the risk of injury), (b) secure health care strategy and (c) living environment and economic status<sup>(13)</sup>.

The majority of ARH were non-psychiatric patients; thus, the assault issue reflects a perspective beyond psychiatry per se and requires a multi-disciplinary/dimensional approach, including: (a) mental health (knowledge on sexual influence, impulsiveness, marital status); (b) education regarding self-protection, socio-economics issue and climatology; (c) cultural and (d) religious practices. Taken holistically, tracking changes on annual assault statistics should have major ramifications both for service providers and society.

The present study had some limitations. The assault data were only a secondary diagnosis of those hospitalized nationwide. Many of the original circumstances might not have been investigated and/or not recorded. Co-existing psychiatric disorders in the present study might have been underreported. Survivors of violence are often treated only for their physical injuries<sup>(14)</sup> and released without psychiatric investigation. Victims of assault, either physical or sexual, should be tracked for the appearance of post-traumatic stress disorder and major depressive disorder<sup>(15)</sup>. Further study should be conducted in a more systematic way and include out-patient, in-patient, community and police records. In order to assess the real burden of assault, further study is also needed on other aspects, including: sickness absence, economic loss and long-term consequences, *e.g.*, quality of life and subsequent psychiatric disorder(s) that may occur *i.e.*, long-term functioning as the effects of physical abuse<sup>(16)</sup>.

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#### Potential conflicts of interest

None.

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## ระบาดวิทยาของผู้ที่ถูกทำร้ายและได้รับการรักษาแบบผู้ป่วยในในประเทศไทยประจำปีงบประมาณ พ.ศ. 2553: เปรียบเทียบระหว่างผู้ที่มีกับไม่มีโรคทางจิตเวช

ภัทรี พหลภาคย์, พูนศรี รังษิณี, นิรมล พจนสุนทร, สุรพล วิระศิริ, สุมิตร สุตรา, สุชาติ พหลภาคย์

**ภูมิหลัง:** การถูกทำร้ายเป็นสาเหตุที่พบบ่อยที่ทำให้เกิดการบาดเจ็บและเสียชีวิต อย่างไรก็ตามในประเทศไทยความรู้เกี่ยวกับระบาดวิทยาทางจิตเวชศาสตร์ของผู้ที่ถูกทำร้ายและต้องรักษาแบบผู้ป่วยในยังมีน้อยมาก

**วัตถุประสงค์:** เพื่อวิเคราะห์ระบาดวิทยาของผู้ที่ถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในของประเทศไทย ประจำปีงบประมาณ พ.ศ. 2553 และเพื่อเปรียบเทียบระบาดวิทยาระหว่างผู้ที่มีกับไม่มีโรคทางจิตเวช

**วัสดุและวิธีการ:** วิเคราะห์ข้อมูลจากรายงานเพื่อเบิกจ่ายค่ารักษาพยาบาลผู้ป่วยในทุกระบบประจำปีงบประมาณปี พ.ศ. 2553 (1 ตุลาคม พ.ศ. 2552 ถึง 30 กันยายน พ.ศ. 2553) ในระบบประกันสุขภาพแห่งชาติประกันสังคมและระบบสวัสดิการรักษายาบาลข้าราชการ ทั้ง 3 ระบบรวมกันจะครอบคลุมเกิน ร้อยละ 96 ของประชากรไทย ข้อมูลจำนวน ผู้ป่วยที่ถูกทำร้ายและเข้ารับการรักษาแบบผู้ป่วยในตามรหัสโรคตั้งแต่ X85-Y09 และมีโรคทางจิตเวชพร้อมด้วยตามรหัส โรคตั้งแต่ F00-F99 ตาม ICD-10 ฉบับ 2010 จะถูกนำมาวิเคราะห์ในด้านต่างๆ ได้แก่ เพศ อายุ ภูมิภาค เดือน ค่าใช้จ่ายในการรักษา ระยะเวลาอนรักษาในโรงพยาบาล อัตราการตาย รายงานความถี่ของผู้ที่ถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในและรายละเอียดต่างๆ เป็นค่าร้อยละ **ผลการศึกษา:** งบประมาณในการรักษาผู้ที่ถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในทั้งประเทศคิดเป็นร้อยละ 0.98 ของงบประมาณของประเทศในการรักษาผู้ป่วยในทุกชนิด (88,964 ล้านบาท) อัตราการรับผู้ที่ถูกทำร้ายเข้ารับ แบบผู้ป่วยในคิดเป็น 0.72 ครั้งต่อการรักษาแบบผู้ป่วยในทุกชนิด 100 ครั้ง และเกิดขึ้น 7.74 ครั้งต่อประชากร 100,000 คน การถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในเกิดกับผู้ชาย (ร้อยละ 80.86) เกิดกับคนอายุ 25-39 ปี และคนอายุ 40-59 ปี ร้อยละ 35.60 และร้อยละ 22.85 ตามลำดับ เกิดจากของมีคม ของไม่มีคม และการใช้กำลังทางกาย คิดเป็นร้อยละ 29.44, 24.40 และ 23.71 ตามลำดับ พบมากในภาคกลางร้อยละ 39.48 และภาคตะวันออกเฉียงเหนือ ร้อยละ 31.16 เดือนที่พบมากที่สุด 3 เดือน (tri-modal) คือ เดือนเมษายน ธันวาคม และตุลาคม คิดเป็นร้อยละ 11.12, 9.45 และร้อยละ 8.90 ตามลำดับ ร้อยละ 0.04 (ชาย:หญิง = 4.22: 1) ของการถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในมีโรคทางจิตเวชพร้อมด้วย ที่พบบ่อยคือ ความผิดปกติทางจิตประสาท และพฤติกรรมที่เกิดจากการใช้วัตถุออกฤทธิ์ต่อจิตประสาท (mental and behavioral disorders due to psychoactive substance use) พบร้อยละ 66.54 ที่พบบ่อยรองลงมาคือกลุ่มความผิดปกติชนิดจิตเภท schizotypal และหลงผิดซึ่งพบได้ร้อยละ 14.23 อัตราตายของผู้ถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในกรณีที่มีและไม่มีโรคทางจิตเวชพร้อมด้วยคือ ร้อยละ 1.03 และร้อยละ 0.30 ตามลำดับ ผู้ถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในมีจำนวนวันนอนรักษาในโรงพยาบาลเฉลี่ย  $5.15 \pm 12.41$  วัน จำนวนวันนอน น้อยที่สุด-มากที่สุดคือ 1-568 วัน ฐานนิยม คือ 1 วัน กลุ่มผู้ที่มีความผิดปกติทางจิตเวชพร้อมด้วยจะมีจำนวนวันนอน ในโรงพยาบาลนานกว่ากลุ่มที่ไม่มี ( $5.2 \pm 12.4$  วัน:  $3.7 \pm 7.5$  วัน) ค่าใช้จ่ายสำหรับการรักษาผู้ที่ถูกทำร้ายจนรักษาแบบผู้ป่วย ในกรณีมีและไม่มีโรคทางจิตเวชพร้อมด้วยคือ 75,811,383.4 บาท และ 791,214,659.9 บาท

**สรุป:** การถูกทำร้ายจนต้องรักษาแบบผู้ป่วยในเกิดขึ้น 0.72 ครั้งต่อการรับผู้ป่วยเข้ารับการรักษาแบบผู้ป่วยในทุกระบบ 100 ครั้ง และเกิดขึ้น 7.74 ครั้งต่อประชากร 100,000 คน ร้อยละ 0.04 ของการถูกทำร้ายและต้องเข้ารับการรักษา ในโรงพยาบาลมีความผิดปกติทางจิตเวชพร้อมด้วย ความผิดปกติทางจิตเวชที่พบบ่อยที่สุด คือ ความผิดปกติทางจิตประสาทและพฤติกรรมที่เกิดจากการใช้วัตถุออกฤทธิ์ต่อจิตประสาท รองลงมาคือกลุ่มโรคจิตเภท และโรคจิตที่เกี่ยวข้อง

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