## CHAPTER IV

## **RESULTS**

Between 1 October 2004 and 30 September 2005 there were 1,251 sexual assault victims reported to PGH. There were 1,022 real rape cases, but 117 cases (9.4 %) were lost to follow up and 9 victims died (0.7%). There were 751 victims (83.0%) eligible, but only 377 cases (50.2%) consented to participate. There was only one male victim and was excluded from the study. So, there were 376 cases in this study. All dead victims were sent to Forensic Medicine Institute of PGH. They were female and aged 4 – 53.

There were 374 real victims, who declined to join this study. The main reasons were 1) couldn't come for follow up on schedule, 2) didn't want to give information about sexual assault because of discomfort. Focusing on the victim who disagreed to participate in this study, there were 370 females, 4 males. The victims aged 10 – 19 years were found in 71.1%, and 20 – 29 years in 19.0%, 1 – 9 years in 5.3% and 30 – 60 years in 4.5%. Almost half of the victims (48.5%) finished in secondary school, a quarter in primary school (23.3%), 18.3% in high school and 9.9% in college or university.

The total number of responders[N] for different questions were not the same.

This was because some victims didn't know the answers for some questions.

Total sexual assault victims 1251(100%) Dead victims 9(0.7%) Come to E. R. 1242(99.3%) Loss to F.U. 153 (12.3%) Real rape False rape Follow up 117 (9.4%) 36(2.9%) 1089 (87.7%) False rape 184 (16.9%) Real rape 905(83.1%) Not eligible 154 (17.0%) Eligible 751(83.0%) Disagree 374 (49.8%) Agree to participate 377 (50.2%) Male 1 Study victims 376

Figure 3. Flow chart of sexual assault victims at Police General Hospital

## 4.1 BASELINE CHARACTERISTICS

Table 3. Characteristics of the victims

Characteristics	Number	Percentage
1. Age (mean = 17.6, min= 2, max=51, SD.=7.3) [N= 376]		
1 – 9 yrs	22	5.9
10 – 14 yrs	119	31.6
15 -19 yrs	140	37.2
20 – 29 yrs	65	17.3
30 - 60 yrs	30	8.0
2. Nationality [N= 376]		
Thai	371	98.7
Foreigner	5	1.3
3. Marital status [N= 376]		
Single	323	85.9
Married	23	6.1
Dating/Cohabitated	18	4.8
Divorced/separated/Widow	12	3.2
4. Education by highest level completed (mean = 8.4,		
SD = 3.1 ) [N= 368]		
Primary school (1 – 6 years)	100	27.2
Secondary school (7 – 9 years)	167	45.4
High school (10 -12 years)	66	17.9
College/University (13 years and over )	35	9.5
5. Occupations [N= 372]		
Employee	106	28.5
Student/ Undergraduate	190	51.1
Unemployed	43	11.6
Childhood (under 8 years)	17	4.5
Others, e.g. business, government officials	16	4.3

Table 4. Characteristics of the victims (continued)

Characteristics	Number	Percentage
6. Living place [N= 376]		
Bangkok	355	94.4
Bangkok – boundary Provinces	9	2.4
Others	12	3.2
7. Living arrangements [N= 349]		
Self	29	8.3
With parents	193	55.3
With relatives	76	21.8
With spouse	32	9.2
Partner, friend	19	5.4
8. Dressing [N= 367]	i	
Naked & Two pieces	4	1.1
Short pants or skirts	39	10.6
Normal uniform pants or skirt with waist and/or	80	21.8
upper chest stripped		
Normal uniform dress	244	66.5
9. Victim behavior or personality		
Alcoholic [N= 374]	8	2.1
Drug addict [N= 373]	2	0.5
Often participate in the night life [N= 374]	23	6.1
Mental retardation [N= 377]	9	2.4
Disability [N= 377]	1	0.3
10. Category of the victim [N= 376]		
Category 1 ( attended within 72 h.)	291	77.4
- Attend within 24 h.	192	51.1
- Attend between 25 h. and 72 h.	99	26.3
Category 2 (attended > 72 h. = 7 d.)</td <td>55</td> <td>14.6</td>	55	14.6
Category 3 ( attended > 7 d. = 14 d.)</td <td>30</td> <td>8.0</td>	30	8.0

Of the 376 victims, 98.7% were Thai nationality, 94.4% lived in Bangkok and 85.9% were single. The majorities of the victims were in the 15 – 19 (37.2%), and 10 – 14 (31.6%) age groups. Almost half of the victims (45.4%) finished secondary school, a quarter in primary school (27.2%). Half of the victims were student/ undergraduated (51.1%), 28.5% were employee and 11.6% were unemployed. With living arrangements, over half of the victims lived with parents (55.3%), 21.8% lived with relatives, 9.2% with spouses, and 8.3% were self arrangement.

For the victims' clothing, 88.3% of victims didn't wear short pants or skirt. Two thirds of the victims were in full dress uniform (66.5%), a quarter were a normal uniform pants or skirt with a normal or closed - fitting blouse and waist stripped (21.8%), only 10.6% were short pants and 1.1% were two pieces or nothing.

The early attendance of the victims at PGH was already higher than expected. Approximately three quarter of the victims belonged to category1, with 51.1% attending PGH within 24 hours since the assault ,while 26.3% came to PGH between 25 hours and 72hours. Fourteen percent and 8.0% in the study belonged to the category2 and category3 respectively.

Most behaviour/personality patterns of the victims were acceptable in general and not caused to seduce assailants. Only 2.1% of the victims were alcoholic, 0.5% drug addicted, 2.4% mental retarded, 6.1% often participated in the night life and 0.3% disabled.

The male victim who was excluded from this study was 8 years old and studied in primary school. He was attacked and anal raped by a stranger around 2.00 A.M. He came to PGH 3 hours after the assault. He didn't remember the location of assault. He resisted by verbal and physical actions, but the stranger used a knife to control him. He was not unconscious during sexual assault. He had multiple abrasion around anal area without physical injury. When he came to follow up 2 weeks after the assault, he was generally healthy.

Table 5. Characteristics of the offenders

Characteristics	Number	Percentage
1 Approximate age (in years) (mean = 25.3, min=10,		
max =53 , SD = 8.2 ) [N= 366]		
10 – 14 yrs	7	1.9
15 -19 yrs	90	24.6
20 – 29 yrs	166	45.4
30 - 60 yrs	103	28.1
3. Nationality [N= 376]		
Thai	368	97.9
Foreigner	8	2.1
4. History of mental disorder [N= 229]	6	2.6
Information obtained from victims		
5. Physical disability [N= 324]	4 .	1.2
6. Number of offenders (min = 1, max = 20, SD =		
2.13 ) [N= 374]		
1 offender	313	83.7
2-5 offenders	40	10.7
6 – 10 offenders	17	4.5
11 – 20 offenders	4	1.1
7. Offender's Relationship to Victims [N= 376]	•	
Stranger	127	33.8
Known people	249	66.2
- friend /closed friend	98	26.0
- cohabitant / dating relationship	55	14.6
- Just knew	43	11.4
- Friend of the people she knew	40	10.6
- Others; stepfather,-relatives, brother in law	13	3.4

The sex offenders in this study were mainly Thai (97.9%). The age ranged from 10 to 53 years with an average age of 25.3 years. Nearly half of the offenders (45.4%) were in the 20 - 29 age group. Almost all offenders were ordinary people. Only 2.6% had history of mental disorder and 1.2% had physical disability.

Considering the number of offenders, most victims (83.7%) were assualted by a single offender. In this study, 26.0% of the offenders were friends/closed friends, 14.6% were dating/cohabitants, 11.4% were just known people, and 10.6% were friends of people the victms knew. About 3.4% of the victims were assualted by their relatives.

Table 6. Characteristics of the assault

Characteristics	Number	Percentage
Offender Method of Approach		
Con (subterfuge or a ploy) [N= 376]	199	52.9
Blitz (no warning) [N= 376]	128	34.0
2. Offender Control of the Victim		
2.1 Weapon [N= 372]	54	14.5
- gun	12	3.2
- knife	29	7.8
- others, e.g. battery, wood	13	3.5
2.2 Threats of harm [N= 367]	179	48.8
2.3 Offender alcohol use [N= 328]	156	47.6
2.4 Victim alcohol use [N= 370]	60	16.2
2.5 Abducted [N= 365]	115	31.5
2.6 Beat [N= 374]	104	27.8
2.7 Offender drug use [N= 237]	33	13.9
2.8 Victim drug use [N= 368]	7	1.9
2.9 Bribery [N= 367]	22	6.0
2.10 Extremities bound [N= 373]	21	5.6

Table 7. Characteristics of the assault (continued)

Characteristics	Number	Percentage
3. Physical force by the offender [N= 374]	320	85.6
- Minimal (little/no physical force)	228	61.0
- Moderate (repeated slaps/hits)	40	10.7
- Excessive (beaten, bruises, lacerations)	47	12.6
- Brutal (sadistic torture)	5	1.3
4. Victim resistance [N= 373]	317	85.0
- Verbal	161	43.2
- Physical	156	41.8

Concerning the assault, con was the most common method used by known perpetrators, such as acquantances, closed friends, cohabitants, family members. However blitz method was commonly used by strangers. In this study, con method was employed in 52.9% and blitz method in 34.0%.

Despite the fact that most victims (85.0%) strongly resisted the perpetrators, they were controlled by physical force in 85.6%. Importantly, the victims were controlled by the perpetrators carrying weapons in 14.5%, which knives and guns were mostly employed in 7.8%, 3.2% respectively. Moreover, other methods the perpetrators used to control victims were threats of harm in 48.8%, alcohol in 16.2%, abduction 31.5%, beating 27.8%, bribery 6.0%, body/extremities bound 5.6% and drug only 1.9%.

Table 8. Time and Place of the assault

Time and Place of the assault	Number	Percentage
1. Day of the assault [N= 366]		
- Monday	59	16.1
- Tuesday	59	15.8
- Wednesday	65	17.8
- Thursday	49	13.4
- Friday	37	10.1
- Saturday	46	12.6
- Sunday	52	14.2
2. Time of assault [N= 372]		
- 00.01 – 6.00	125	33.6
- 06.01 – 12.00	49	13.2
- 12.01 – 18.00	75	20.2
- 18.01 – 24.00	123	33.1
3. Place of event [N= 372]		
- Victim Residence	81	21.8
- Offender Residence	155	41.7
- Others e.g. public toilets, gas stations,	136	36.6

Sexual assaults occurred evenly throughout the week, with little different frequency on each day of the week. However, the incidents most frequently occurred during the nighttime, 18.01 - 24.00 (33.1%) P.M. and 0.01 - 06.00 (33.6%) A.M. Most of the incidents occurred in perpetrators' residences (41.7%) and victims' residences (21.8%).

Table 9. Type of Sexual Acts during the Assault		1
Type of Sexual Acts during the Assault	Number	Percentage
1. Kissed [N= 337]	257	76.3
2. Breasts fondled [N= 336]	293	87.2
3. Vaginal insertion [N= 361]	346	95.8
4. Semen ejaculated in vagina [N= 278]	170	61.2
5. Oral (offender to victim) [N= 345]	81	23.5
6. Oral (victim to offender) [N= 357]	28	7.8
7. Anal insertion [N= 365]	19	5.2
8. Foreign object [N= 347]	47	13.5
9. Offender masturbates self [N= 321]	49	15.3
10. Offender masturbates victim [N= 351]	90	25.6
11. Condom used [N= 335]	45	13.4

Sexual acts of the perpetrators varied greatly, 76.3% by kissing and 87.2% by breast fondling. Vaginal, oral and anal sexual assaults were found in 95.8%, 7.8% and 5.2% respectively. For further details, semen was ejaculated into vagina in 61.2%, condoms were used in 13.4%, oral sex by offenders to victims were reported in 23.5%, use of foreign objects in 13.5% and masturbation during rape in 15.3%.

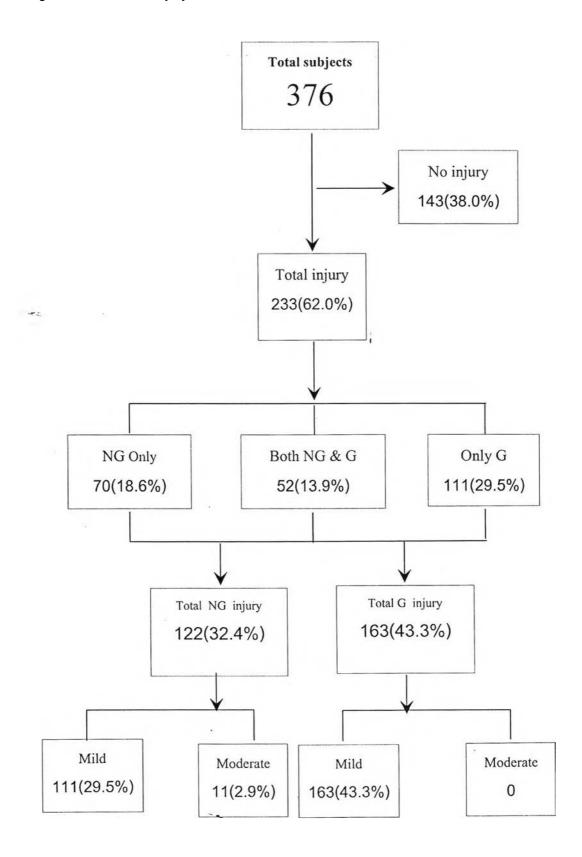
Table 10. Injuries of the victims

Sites of injury	Number	Percentage
1. Non – genital Injury [N= 376]	122	32.4(95%CI= 27.7%, 37.1%)
- Mild injury [n = 122, N = 376]	111	29.5
		(95%CI= 27.7%, 37.1%)
- Moderate injury [n = 122, N = 376]	11	2.9
		(95%CI= 1.2%, 4.6%)
- Non - genital injury only [N=376]	70	18.6
- Face injury [N= 376]	35	9.3
- mild	31	8.2
- moderate	4	1.1

Table 11. Injuries of the victims (Continued)

Sites of injury	Number	Percentage
Neck injury [N= 376]	47	12.5
- mild	44	11.7
- moderate	3	0.8
Head injury [N= 376]	20	5.3
- mild	18	4.8
- moderate	2	0.5
Body injury [N= 376]	63	16.8
- mild	55	14.6
- moderate	8	2.2
Upper extremities injury [N= 376]	47	12.5
- mild	45	12.0
- moderate	2	0.5
Lower extremities injury [N= 376]	54	14.4
- mild	53	14.1
- moderate	1	0.3
2. Genital Injury [N= 376]	163	43.4
- Genital injury only [N=377]	111	29.5
- Labia majora injury [N= 376]	34	9.0
- Labia minora injury [N= 376]	70	18.6
- Vaginal injury [N= 376]	24	6.4
- Posterior fourchette [N= 376]	39	10.4
- Hymen (new tears) [N= 376]	103	27.4
- Anal injury [N= 376]	7	1.9
3. Both non - genital and genital injury[N=376]	52	13.8
4. No injury [N=376]	143	38.0

Figure 4. Pattern of injury



NG = non genital, G = genital

One hundred and forty three victims (38.0%, 95%CI = 33.1%, 42.9%) didn't have any injuries. Among 233 victims (62.0%, 95%CI = 57.1%, 66.9%) who got physical injuries, 70 victims (18.6%, 95%CI = 14.7%, 22.5%) had non – genital injury only, 111 victims (29.5%, 95%CI = 24.9%,34.1%) had genital injury only and 52 victms (13.9%, 95%CI = 10.3%,17.3%) had both non genital and genital injuries. Among 122 victims who had non – genital injuries, 111 victims had mild injury, while 11 victims had moderate injury. All 163 victims who had genital injuries had mild injuries. (Figure 4.)

Table 12. Infection of the victims

Infection of the victims	Number	Percentage
1. Gonorrhea (Gram Stain)		
- 1 <sup>st</sup> visit [N= 278]	8*	2.9
- 2 <sup>nd</sup> visit (2 weeks after the assault) [N= 203]	6**	3.0
2. Trichomonas vaginalis (wet smear)		
- 1 <sup>st</sup> visit [N= 271]	3	1.1
- 2 <sup>nd</sup> visit ( 2 weeks after the assault) [N= 203]	3**	1.5
3. Bacterial vaginosis [N = 256]	4	1.6
2 <sup>nd</sup> visit at 2 weeks after the assault		
4. Pelvic Inflammatory disease [N= 258]	0	0
2 <sup>nd</sup> visit at 2 weeks after the assault		
5. Positive VDRL		
- 1 <sup>st</sup> visit [N= 366]	0	0
- 2 <sup>nd</sup> visit (3 months later) [N= 161]	0	0
6. Positive antiHIV		
- 1 <sup>st</sup> visit [N= 365]	1	0.3
- 2 <sup>nd</sup> visit (3 months latert) [N= 160]	1***	0.6

<sup>\*</sup>we did not do Gram stain for the first 99 cases

At the first visit, 8 victims (2.9%, 95%CI = 0.9%, 4.9%) got infected with N gonorrhoeae and 3 victims (1.1%, 95%CI = -0.1%, 2.3%) with Trichomonas Vaginalis. At

<sup>\*\*</sup>new cases, not the same cases as at first visit

<sup>\*\*\*</sup> same cases as at first visit

the 2 weeks follow-up, 6 victims got infected with Neisseria gonorrhoeae (3.0%, 95%CI = 0.7%, 5.3%), and 3 victims with Trichomonas Vaginalis (1.5%, 95%CI = -0.2%, 3.2%) and 4 victims with bacterial vaginosis (1.6%, 95%CI = 0.1%, 3.1%), but no pelvic inflamatory disease (0%). Two hundred and fifty eight victims (68.9%) came to follow-up at 2 weeks after the assaults. All blood check for VDRL at the initial visit were negative, There was one victim with positive antiHIV test at initial visit. All 160 victims who came for follow up visit at 3 months had negative VDRL and antiHIV.

Table 13. Pregnancy after the assault

	Pregnancy and Management		Number	Percentage
1 Pregn	nancy	4		
At	first visit [N= 349 (aged 11 - 45 y.)]		5	1.4
At	2 <sup>nd</sup> visit ( 2 weeks since the assault)		4	1.7
[	[N= 237 (aged 11 - 45 y.)]			
2. Ther	apeutic abortion		9	
At	t Police general Hospital		7	
At	other hospital service		2	

Five (1.4%) of the reproductive aged victims (11 – 45 years) were found to be pregnant at first visit. They were obviously not the consequence of the assaults. At 2 – week follow up visit, 4 (1.7%, 95%CI =0.1%%, 3.3%) of the reproductive aged victims (N=237) were found to be pregnant. Therapeutic abortion was performed for all 9 pregnant victims, 7 at PGH and 2 elsewhere.

For the treatment and prevention protocol for victims, 57.1% received pregnancy prevention, 44.5% received STI prevention, and 69.2% received HIV infection prevention

Every victim had to be verified for specimens in vagina, the results were 17.5% positive tests for sperm and 35.2% positive test for acid phosphatase. For sperm verification, 14.5% of the victims were positive tested within 24 hours since the assault,

3.0% over 25 h. and not found after 6 days. Acid phosphatase was not like sperm verification, it could be found till the 12<sup>th</sup> day after the assault. Twenty five point two percent of the victims were positive tested within 24 h. after the assault, 6.6% between 25 h. and 72 h. and the rest over 72h.