CHAPTER V

DISCUSSION

About 62% of sexual assault victims had physical injury, 19% had non - genital injury alone, 30% had genital injury alone and 14%had both. Most of the injuries were mild to moderate degree. The infection rates were very low, 3% for Neisseria gonorrhea and 1.5% for Trichomonas vaginalis. The pregnancy rate was also very low (< 2%).

Geist RF. (1988) and Rigg N. et al (2000) found that nongenital injuries were documented in 40 – 67 percent, but only 4 percent are serious, and fewer than 1 per cent require hospitalization. Genital injuries were found about 50 percent of cases, but only 1 percent needed repair [46,64]. Many studies found the same as above about mild injuries of the victims, but sexual assault by a stranger was associated with more non-genital injuries and more likely to involve weapons or physical coercion [14,28,35]. Nevertheless, 38.0% of the victims were not found physical and genital injury, while Rigg N. et al found 20% of victims had no trauma noted on examination [64].

In U.S.A. the national rape-related pregnancy rate is 5.0% per rape among victims of reproductive age (aged 12 to 45) [65]. The rates of pregnancies from rape was rather low (2% - 4%) similar to the studies of DeLahunta E.A., Dhanapoom N, Islam MN.[4,9,28]. The risk of a sexually transmitted infection (STI) varies from 0% to 26.3% and the risk for HIV varies from 0.1% to 3% [14,59].

The distribution of victim age groups in this study was rather close to many studies, most frequent sexual assaults occurred in adolescent age group, especially in full time study [12,27]. In our study, we found 68.8% of the victims in 10 – 19 age group and 51.1% were student/undergraduate. With rape related to dressing, we found most victims(66.5%) wore normal dress, which was different from the study of Synovitz LB. et al (1998), which reported that one important variable of women's being sexually victimized was provocative dress [66]. Islam MN et al (2003) found 23.7% was examined within 72 h. of occurrence[28], while Grossin C. et al (2003) found 76% examining after 72 h. were under the age of 15 years[45]. Both studies were far different in percentage of the early attending victims and age – group of the late attending

victims. There were approximately half of the subjects in this study attending hospital within 24 h., which did not change from the victims (46.6%) attending at 15 years ago[9]. Grossin C. et al [45] found that the assailant was a family member in 58% of the cases (the father in 30% of the cases) in the victims attending late, while in this study brother in law was found only 1 cases and no father or relatives involved .

Although there are recommendations regarding STI prophylaxis in the setting of sexual assault, it is generally left to the discretion of the attending physician to determine if a patient warrants HIV infection postexposure prophylaxis (PEP). However most pediatric infectious disease physicians, including in PGH i nitiated HIV PEP to rape victims in the absence of institutional policies [67]. From the results, the risk of STIs after rape is very low, antibiotics prophylaxis may be not necessary if the victims can follow up 2 weeks since the assault.

Pertaining to verifying specimens in vagina, The identification of sperm and acid phosphatase in rape cases depended on time interval since the assault, procedure of semen collection and vagina washing before examination. In this study, sperm was positive tested less than 20%, acid phosphatase were positive tested about one third. The results were similar to the studies of Dahlke M.B. et al [68] and Ferris L.E. et al[69] The best chance of recovering seminal evidence is most frequently stated as being less than 50%, with far lower chances after 72 hours of the alleged sexual assault [68,69].

Strength and limitation

We collected the data prospectively to ensure the validity and completeness. We calculated the sample size and got the target number of subjects to ensure the precision of the magnitude of the health consequences.

Because the infection and pregnancy rates after sexual assault are relatively uncommon, our study doesn't have enough subjects to set precise rates. The other obvious limitation is the follow up rate at 2 weeks and 3 months.

Clinical implication

This study indicates that among victims who survived the sexual assaults, the health consequences are quite mild. It is very unlikely that management at PGH or other hospital can reduce injury. The current management for STI and pregnancy prevention seems to work reasonably well and should be at least maintained at this standard.

Although physical health cosequences of the sexual assault victims are not seriously affected, all health providers still have to continue servicing and helping them. Mostly, the hospital care focussed on the healing of physical injury but not the healing of the psychological trauma.

Research Implication

This study can address only physical health consequences after sexual assault which seems to be not serious. There is still a great lack of information about mental health consequences especially among child or adolescent victims. Future studies should aim at addressing this problem.