MEDICAL ISSUES WITH RAPE VICTIMS

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MEDICAL-LEGAL EVIDENCE

Prior to the early 1970's, most of the medical literature discussing sexual assault focused primarily on the collection and analysis of medico-legal evidence, especially that addressing the issue of penetration (Holmstrom & Burgess, 1976). This section will discuss the issues of evidence. As a starting point, it should be noted that the best evidence of penetration in a sexual assault case is the presence of semen in the orifice penetrated and the identification of spermatozoa is considered the best proof of the presence of semen (Fisher, 1949).

There has been continuing discussion about the maximum morphological survival period of spermatozoa. Davies and Wilson (1974) reported that spermatozoa are usually found up to three days after intercourse and sometimes up to six days afterward. Eungprabhanth (1974) found that the maximum morphological survival time of sperm in the vagina was six days post coitus. In vaginal fluids maintained under nonsterile conditions, motile sperm have been identified up to 24 hours and nonmotile sperm have been identified after 179 days (Rupp, 1969). In a rape-murder case of a woman found in the mountains of Utah, nonmotile sperm were identified 16 days after coitus.

While the identification of spermatozoa may be the best proof of penetration, it is frequently impossible to identify the presence of spermatozoa, particularly in light of the increased number of vasectomies performed yearly

(Enos, Beyer, & Mann, 1971) and the evidence that from 34 percent to 40 percent of sexual offenders suffered some type of sexual dysfunction at the time of the assault (Groth & Burgess, 1977). These authors reported that the medical records of 92 adult rape victims indicated the presence of sperm in only 35 percent of the cases.

The identification of other constituents of seminal fluids has been investigated as evidence of sexual activity, with the most common constituent studied being acid phosphatase. The acid phosphatase test has been identified as a useful adjunct in examining material suspected of being ejaculate (Fisher, 1949; Walther, 1971) and evidence of the presence of semen identified by the acid phosphatase test was accepted by the Massachusetts Supreme Court over 30 years ago (Fisher, 1949).

The literature reflects some debate as to the utility of the acid phosphatase test. One side of the controversy points out that tests for acid phosphatase allow the detection of aspermic seminal plasma and the separation of semen from other body fluids (Riisfeldt, 1946; Adams & Wraxall, 1974). Additionally, it is stated that the acid phosphatase test is useful in the location and identification of seminal stains (Kaye, 1949; Kind, 1965; Sivaram, 1970; Walker, 1950). Riisfeldt (1946) asserts that the acid phosphatase reaction is more reliable than tests for spermatozoa and presents four cases of disagreement between the demonstration of spermatozoa and the phosphatase reaction to support his position.

On the other side of the debate, Godwin and Seitz (1970) concluded that the acid phosphatase reaction is not as accurate as a test for spermatozoa.

Additionally, Willott (1972) found L. tartrate inhibitable acid phosphatase on vaginal swabs from females who had not had intercourse for at least one month and concluded that a positive acid phosphatase reaction should not be used as a means of identifying semen in the absence of other evidence. However, no evidence has been published to date negating the importance of the acid phosphatase test as, at least, an adjunct test for obtaining evidence of recent sexual activity and, therefore, a useful tool in the medical examination of sexual assault victims.

There are two types of medico-legal evidence in sexual assault cases that have received very limited attention in the literature. Dental evidence may be provided either by a sadistic rapist biting his victim or a victim biting the assailant in self-defense. Levine (1977) describes the role of the forensic odontologist in the investigation of some crimes, including sexual assault.

The second area of evidence that has been ignored is indications of recent sexual activity on the part of the suspect. Given (1976) describes a technique for the collection and examination of penile washings for the presence of vaginal cells. A simplification of Merkel's technique using the lugol stain allows the identification of vaginal cells by their glycerin content (Thomas & Van Hecke, 1963). These areas of research merit much more investigation.

To insure better quality in the collection of medico-legal evidence, some hospitals have developed rape evidence kits. The use of such kits helps to insure that all the necessary tests are conducted, the collection procedures are uniform, and that the chain of evidence is protected. The experience of

the city of Houston suggests that the use of such kits results in more successful prosecution and, thereby, eases the experience of the victim.

EXAMINATION AND TREATMENT

Since the early 1970's, an abundant proportion of the literature has focused on the medical examination and treatment of sexual assault victims. The recommended steps involved in the examination and treatment include a general physical examination, a gynecological examination, treatment of any physical injuries, preventive treatment for venereal disease and, less frequently, preventive treatment for pregnancy.

There is some disagreement as to the nature of injuries suffered by sexual assault victims. Some feminist authors describe very serious injuries occurring (Gager & Schurr, 1976). Additionally, Groth and Burgess (1977) reported that medical data revealed that 63 percent of 92 rape victims had at least one sign of trauma on some part of their body while 43 percent of the victims had one or more signs of gynecological trauma.

In contrast, Hayman, Lewis, Stewart, and Grant (1967) reported that of 322 sexual assault victims, 14 suffered severe trauma requiring emergency treatment and of these, four also required hospitalization. In another study, Lanza (1971) found that of the 1,451 victims seen by the Washington, D.C. Police Department Sex Crimes Section, only eight had major physical injuries. A review of many other articles indicates that injuries suffered by sexual assault victims are generally minor in nature (Ringrose, 1969; Knobel &

Marescotti, 1973; Massey, Garcia & Emich, 1971; Hayman, Lanza, Fuentes & Algor, 1972; Giacinti & Tjaden, 1973; Voight, 1972).

With regard to the prevention of pregnancy in sexual assault cases, there is an ongoing disagreement in the literature about postcoital contraceptive therapy. The administration of diethylstilbestrol (DES) is widely recommended for the prevention of pregnancy in sexual assault cases (American College of Obstetricians and Gynecologists, 1973; Kuchera, 1971). However, Massey, Garcia and Emich (1971) reported a high incidence of gastrointestinal side effects, as well as four pregnancies, established in the treated cycle subsequent to postcoital contraceptive therapy with DES. Discussing the medical dangers associated with the morning-after pill, including the latent development of cancer, rapid growth of existing cancer, and the production of DES daughters who have abnormal vaginal cellular growth that may be precancerous, Weiss (1975) strongly opposes the use of DES and considers menstrual extraction and vacuum aspiration to be safer alternatives.

One set of guidelines for the administration of DES is offered by Massey, et al. (1971). The Boston Rape Crisis Center (1975) stresses the importance of informing the woman of the possible side effects of DES and allowing her to reach her own decision, a position also assumed by the California Medical Association (1975).

Much of the literature published since the early 1970's reflects an increased interest in and concern for the victim's physical well-being. For

example, numerous articles recommend general medical management procedures, including follow-up suggestions, to be implemented in cases of sexual assault (Seltzer, 1977; Roth, 1972; Williams & Williams, 1975; Hayman, 1970; Rosenfeld & Garcia, 1976; "Victims of rape," 1975), while other articles specify the management procedures followed at specific hospitals, such as the John F. Kennedy Memorial Hospital in Philadelphia (deMasi, 1974), Philadelphia General Hospital ("Rape is an ugly word," 1971), Parkland Memorial Hospital in Dallas (McCubbin & Scott, 1973), Beth Israel Hospital in Boston (Bassuk, Savitz, McCombie & Pell, 1975), the University of Chicago Hospitals ("How they help rape victims at the University of Chicago," 1973; Crum, 1974), and the Bornalillo County Medical Center in Albuquerque, New Mexico (Kaufman, Hilaski, DiVasto, VanderMeer & Eppler, 1975).

ASSESSMENT OF TREATMENT SERVICES

In the last few years, there has been an increased interest in evaluating the treatment of sexual assault victims at hospitals. The quality of emergency room care of sexual assault victims appears to range from very poor to excellent. For example, some hospitals refuse to admit rape victims as patients unless the victim has reported the assault to the police (LeBourdais, 1976).

> Most police officers have difficulty finding a hospital that will treat rape victims. Hospitals have exhibited both reluctance to provide medical treatment that may involve later court testimony and disparaging attitudes toward rape victims. (Center for Women Policy Studies, 1975, p. 12)

Hanss (1975) reports a lack of uniformity in the collection of medico-legal information and poor follow-up care for rape victims in three major hospitals in Maricopa County, Arizona.

A more extensive survey of the care of rape victims in hospitals throughout the country indicate that all but two of the hospitals surveyed provided some services to rape victims (Geis, Chappell, & Cohen, 1975). While the quality of the treatment was frequently questionable, as evidenced by the fact that most of the hospitals failed to provide prophylactic drug treatment for venereal disease, the responses of the hospitals indicated an increasing national awareness of the problem of rape and a growing concern for improving services to rape victims.

On the basis of 19 site visits and telephone surveys with an additional 20 medical facilities, the Center for Women Policy Studies (1975) produced a handbook discussing the following findings on the treatment of rape victims by medical facilities: (1) where victims receive medical treatment; (2) preexamination procedures; (3) the medical examination; (4) follow-up treatment; (5) training; and (6) coordination with other institutions affecting the victim.

Much of the criticism directed at the response of medical facilities focused on the attending physician.

> In more than one community doctors have been called the 'weakest link' in the team of hospital personnel attending the rape victim because of a lack of sensitivity displayed. Doctors have been accused of not caring to develop skills in the treatment of rape victims because such skills are not necessarily transferable to a lucrative private practice. And, they have been accused of having limited training: being medical technicians who perform the technical procedures but have little or no training in the emotional care and support of victims. (Center for Women Policy Studies, 1975, p. 34)

The literature suggests that the most sensitive treatment of sexual assault victims is generally available at hospitals and medical centers that have established special treatment units for such victims. These units provide comprehensive care, including counseling and follow-up services by organizing diverse resources necessary to provide the care and to make victims aware of nonprofessional support groups. The importance of follow-up services cannot be overlooked. The Center for Women Policy Studies (195) reported that many hospital programs failed to offer follow-up care. Yet, such services may be critical in helping the sexual assault victim readjust.

Two studies demonstrate the success of such programs. Solomon (1974) reported favorable results in her study of sexual assault victims treated at

the Rape Treatment Center at Jackson Memorial Hospital. Of these victims, 92 percent reported that their treatment by the rape center physician was satisfactory or better. During the initial interview at the hospital and three months later, 124 rape victims were asked what their reactions were to the services rendered by the hospital staff at Boston City Hospital (Burgess & Holmstrom, 1975c). Approximately 25 percent of the victims had a positive immediate reaction, while approximately 54 percent had a neutral reaction and 21 percent had a negative reaction. With regard to long-term reactions, 27 percent were positive, 46 percent were neutral, and 12 percent were negative.

Follow-up studies such as these are imperative in order to mold victim services to meet victim needs. The study by Solomon (1974) already noted obtained information about specific components of the program at Jackson Memorial Hospital. Such an evaluation approach offers the opportunity to develop responsive victim service programs.

It has been suggested that if professionals, including medical personnel, were more accountable to sexual assault victims, victims' reactions to them would be more positive. Such accountability can take the form of explaining medical procedures to the victims. "Few hospitals are diligent in informing the victim of the necessity for and possible effects of medical procedures" (Center for Women Policy Studies, 1975, p. 25).

TRAINING

A second procedure for improving the reaction of medical personnel to sexual assault victims has been through special training programs. "Most

hospital rape programs pride themselves on their training sessions for personnel who deal with rape victims" (Center for Women Policy Studies, 1975, p. 46). Such training programs generally consist of information sharing sessions and "sensitivity" training. During the information sharing sessions, medical personnel may be informed of the medico-legal procedures that should be performed, the importance of maintaining the chain of evidence, and possibly the reaction of victims to rape.

Participation in such training programs is generally voluntary. The results of the survey conducted by the Center for Women Policy Studies (1975) indicate that:

> Training doctors has been more difficult than training other personnel because the doctors feel they have merely a technician's role to perform--providing the medical examination. They also complain that they lack time to participate in such programs. (p. 49)

A suggested solution to this problem is to begin such training while the physician is in medical school. However, to date, medical schools have not generally followed this recommendation.

PERSONNEL ROLES AND ATTITUDES

The Center for Women Policy Studies (1975) reported that in many of the hospital programs surveyed, emergency room nurses have assumed lead

positions. However, the role of the nurse in dealing with sexual assault victims has received only scant attention in the literature. Appell, Baskin and Smith (1976) stress the importance of the first half hour of interaction between medical personnel and sexual assault victims and suggest that a supportive stance by the nurse is imperative. They recommended the use of Transactional Analysis by the nurse to improve the handling of a rape victim and return her to a pre-crisis state. Gill (1975) also discusses the role of the nurse in handling the rape victim and suggests that one of the responsibilities of the nurse is to provide warm and empathic understanding for sexual assault victims.

The Sex Section of the Washington, D.C. Metropolitan Police Department works with a nurse specialist who coordinates the services of the Sex Section with medical and community facilities. Within a one-year period, 47 percent of sexual assault victims had at least one contact with the nurse. The role of the nurse should receive more attention and emphasis in the literature. As an integral member of the medical team and as the member who maintains the most prolonged contact with the rape victim, her role should not be slighted.

Physicians are in an excellent position to provide emotional support to sexual assault victims and, if necessary, to counsel family members as well. The counseling responsibility of the general practitioner (Murray, 1975) and other physicians (Halleck, 1962; Scrignar, 1968, Zussman, 1971) is receiving increasing attention in the literature. In order to successfully counsel sexual assault victims, medical personnel must first examine their own attitudes

toward sexual assault victims and come to grips with their own feelings. In a discussion of the negative and judgmental attitudes that many Canadian medical personnel have towards rape victims, LeBourdais (1976) offers the following physician statements:

> Says a male Toronto gynecologist, 'There is one type of woman I would have a hard time believing was raped. A woman between 16 and 25, on the pill, and no longer a virgin.' (p. 12)
>
> Ottawa counselors report instances where physicians have told patients 'there is no such thing as rape' during or prior to examination. (p. 12)

It has been suggested that sexist stereotypes, seldom challenged by women of equal status, underlie the negative attitudes many physicians have toward rape victims (Bruce, 1975). Unfortunately, the Center for Women Policy Studies (1975) observed that few hospital rape programs have attempted to change the attitudes of physicians.

Research on the attitudes toward rape victims held by physicians indicate that the attitudes are more positive than suggested by current literature based on anecdotal information from rape victims. King, Rotter, Calhoun and Shelby (1975) compared attitudes toward sexual assault held by 19 physicians and 21 volunteer counselors at the Rape Center at Grady Memorial Hospital. While the physicians had more positive attitudes about rape victims than anticipated, there were significant differences in the attitudes of physicians as compared to those of volunteer counselors, with physicians having the

more negative attitudes. For example, the physicians assumed that women made more false accusations of rape than did the counselors and judged personality traits of some victims as causing the rape. Additionally, the physicians identified seductive behavior by the victim as precipitating the rape more often than did the counselors. The physicians also viewed rape as a sexual crime more than did the counselors.

McGuire and Stern (1976) conducted a survey of physicians' attitudes toward sexual assault and compared their knowledge level and attitudes with those of college students. Both the physicians and the students correctly answered about 60 percent of the factual questions and it was found that physicians and male students shared similar attidues toward sexual assault. In contrast, female students had a tendency to overestimate the incidence of rape, the physical effects resulting from rape, and the duration of the psychological effects.

CONCLUSIONS

The medical literature on sexual assault is beginning to reflect some of the changes that have been evidenced in other fields. However, these changes are slow and arduous. With the exception of the collection and analysis of medico-legal evidence, there has been limited research on medical aspects of sexual assault. Much of the research is based on anecdotal reports and reviews of medical records. Thus, the findings in part may be a function of the population studied, the location of the study, or even researcher bias.

It is hoped that some methodologically improved research may be forthcoming. One area that has received little attention is the effect on the victim of her experience with the medical system. Ways to improve this interaction have been identified and represent a high priority for future program and concept developments.

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