

A Public Health Program for Sexually Assaulted Females

CHARLES R. HAYMAN, M.D., M.P.H., FRANCES R. LEWIS, B.S., WILLIAM F. STEWART, M.S.,
and MURRAY GRANT, M.D., D.P.H.

THE FOLLOWING abstract from the clinical records of the District of Columbia Department of Public Health points up a situation which is occurring with increasing frequency throughout the United States.

A 2½-year-old girl was taken to a local hospital after she was attacked in her home by an unknown man. She suffered deep vaginal tears. She was given a sedative and transferred to the municipal general hospital where she was examined, treated, and discharged. Her parents were instructed to give her sitz baths and to apply a vaginal cream. Four months after the incident, the child had recovered physically.

The Situation in D.C.

In September 1965 a woman who had been raped was questioned by members of the Metropolitan Police Department's sex squad and taken to the District of Columbia General Hospital for examination and treatment. In subse-

Dr. Hayman, Mrs. Lewis, and Dr. Grant are with the District of Columbia Department of Public Health. Dr. Hayman is associate director for preventive services, Mrs. Lewis is a senior public health nurse, and Dr. Grant is director of the department. Mr. Stewart, chief of the department's biostatistics section when this paper was prepared, is now chief statistician at Saint Elizabeths Hospital, Washington, D.C. The paper was presented at the 94th annual meeting of the American Public Health Association in San Francisco, November 3, 1966.

quent statements to the newspapers, she complained strongly about the emergency police and medical procedures.

The patient stated that the initial questioning by the police was too lengthy and detailed, and it delayed her transportation for medical examination. It took 3 hours from the time of her arrival at the police station for questioning, return by police car to the scene of the crime, and then to the hospital. She felt that the police treated her more like a "cold statistic than a human being."

At the hospital emergency room the patient had to wait 1 hour and 40 minutes for examination, which was accomplished in 10 minutes. The examining physician did not offer a douche or other cleansing materials. His services were confined to the medicolegal examination. The patient stated that "the medical search for evidence coldly ignores the patient," and that the entire medical procedure was inhumane.

The police then asked the patient to return to headquarters for questioning, but she refused and insisted on going to her private physician. Finally, 7 hours after the assault, the patient received treatment.

An investigation was immediately made of the current practices, and certain procedures were changed. The most important change was that of reducing preliminary questioning by the police to the essential minimum and taking the victim to a hospital as soon as possible

thereafter. Medical procedures for initial examination and treatment were revised by the health department and distributed to its staff at the District of Columbia General Hospital and to all other hospitals in the District. All were asked to provide the emergency service. For various reasons, however, particularly staff physicians' fear of having to testify in court, among the voluntary hospitals only the Children's Hospital responded.

According to the police department, 90 cases of rape or attempted rape were reported to the FBI in 1964. However, about 150 sexual incidents had been thoroughly investigated by the sex squad and dropped for lack of enough evidence to warrant prosecution. About 200 investigations were terminated immediately after initial questioning and medical examination because they did not merit further police consideration, and in about an additional 160 cases, the police questioned the complainants but did not consider them in need of medical examination. Except for victims who required emergency treatment, the police requested the examination only to determine sexual penetration for proof of rape—if the penis touches within the labia minora, against the extreme will of a female of a certain age (1). In the District of Columbia, a girl under 16 years of age cannot legally consent to sexual intercourse (statutory rape).

The 90 cases reported to the FBI consisted of rape and attempted rape, but the additional 500 or so complaints to the sex squad included for adult victims forced genital contacts other than intercourse, voluntary intercourse (rather than assault), and imaginary assault. For adolescents and young children, the complaints also included statutory rape, incest, concubinage, seduction, and molestation. We considered all of these cases to be of possible medical and public health significance.

To determine whether assault victims needed further assistance after the emergency period, the department of health initiated a followup program on September 15, 1965. We intended to test the hypothesis that patients need emotional support and that they would welcome guidance from nurses and referral for psychiatric and medical assistance. We anticipated that these measures would be needed particu-

larly for the prevention and treatment of emotional trauma and also for detection and treatment of pregnancy, venereal disease, and injury after the original assault.

Procedures

When a complaint is received, the patient (or parent) is questioned by a member of the sex squad to establish the type of incident, a description of the assailant, and other pertinent information. If the police decide that the complainant needs a medical examination to determine sexual penetration or emergency treatment, they take her to District of Columbia General Hospital, or, if she wishes, to another local hospital or to a private physician. A policewoman escorts the patient.

The liaison public health nurse receives the report of the medical examination from the sex squad on the following day. Within a few days, the nurse contacts the patient by telephone, visit, or both, and if necessary, by a followup letter. The patient is then referred to the senior public health nurse in her district. (A senior public health nurse was selected for each of the nine nursing districts to maintain contact with patients.)

Each patient is seen or telephoned as often as indicated, in the nurse's judgment. Many patients also telephone or visit the nurse. Medical and psychiatric consultation is available to the nurse to help her serve the patient. The nurse refers patients to public and private physicians or health facilities, and she checks to find out if the patient has kept her appointment and what kind of treatment has been prescribed.

After 90 days from the first contact, the nurse continues to make periodic telephone calls or visits to patients who need further counseling or referral or whose cases are being processed further by the police, because these patients are considered to be under great emotional strain.

Findings

During the 9-month period, September 15, 1965 through June 15, 1966, the sex squad received 668 complaints. Of the complainants, 335 had a preliminary questioning, an initial medical examination, and were referred to the bureau of nursing. Thirteen of these com-

plainants were boys and 322 were women and girls.

After reviewing the police, medical, and nursing records, we classified the 322 female patients as probable victims of the following types of assault: forcible rape, 232; statutory rape, 26; seduction (under 13 years of age), 20; forced genital contact, 12; attempted rape, 7; incest, 2; molestation, 2; seduction of adult, 1; voluntary intercourse (age 18), 1; and other, 1. In 7 instances the incident was imagined, and in at least 11 the incident was fabricated.

Our classification follows the descriptions given by Oliven (1). We could not use the police classification because two-thirds of the 668 complaints were not classified according to legal categories. They were considered miscellaneous complaints, primarily because there was not enough evidence to warrant further investigation toward prosecution; for example, a woman obviously raped might be entirely unable to identify her assailant. Of the 322 females referred for nursing service, however, 145 were classified as having cases warranting prosecution or already adjudicated.

The nurse attempted to find each victim within 72 hours after she received the report from the police department; 97 were contacted within 24 hours and 216 within 48 hours. A number were interviewed in the office of the sex squad. In some instances the patient or family

was greatly upset and had gone to visit relatives or had moved out of town for a few days to a week. On the other hand, others had returned to work and thus initial contact was delayed.

Thirteen adults could not be located because they had moved or had given a fictitious address. Six patients refused assistance at initial contact: three said they had not been assaulted, two mothers refused nursing assistance for their daughters, and another mother stated that her daughter was too disturbed to talk to anyone. On second contact, the last mother said that she would take her daughter to a private physician. None of these victims or mothers were overtly hostile to the nurse. Fourteen other victims or mothers did not want nursing assistance, but accepted referral to a physician or clinic. Thirteen children had been taken to welfare facilities by the police, and followup information was obtained from the nurses at these facilities.

Of the 322 females referred to the nursing bureau, 23 were children aged 2 through 6 years, 53 were 7 through 12 years old, 113 were teenagers under 18, and 133 were adults—the oldest was 88. Only 13 percent were white (see table). Initial examinations were performed on 308 patients at the District of Columbia General Hospital, on 12 at other local hospitals, and on 2 at physicians' offices.

During assault, 12 patients suffered severe

Number and rate of sexually assaulted women and children, by age and color, Washington, D.C., September 15, 1965 to June 15, 1966

Age group of victim (years)	Number of persons			Case rate		
	Total	White	Nonwhite	Total	White	Nonwhite
0-4	11	1	10	25.6	10.0	30.3
5-9	36	4	32	101.0	56.8	111.9
10-14	81	1	80	294.1	17.7	365.6
15-19	75	9	66	247.0	99.4	309.9
20-24	43	13	30	129.2	94.5	153.6
25-29	12	2	10	42.5	19.1	56.2
30-34	20	1	19	69.7	10.5	99.0
35-44	21	3	18	34.7	14.0	45.9
45-54	11	4	7	20.5	15.5	25.1
55-64	6	1	5	13.7	3.7	29.3
65 and over	6	3	3	13.5	9.8	21.9
All ages	322	42	280	75.0	24.7	108.0

NOTE: Rates (per 100,000 females in specified groups) are for a 9-month period, which excludes the summer months of peak incidence.

trauma. Two patients with severe vaginal tears required hospitalization, one for repair of a digital nerve and the other for a fractured nose and scalp laceration. Surgery was performed on two patients in the emergency room, one had a severe vaginal tear and bleeding and the other had severe laceration of the buttocks. Six other patients were treated for less severe lacerations and bruises.

The following conditions were found at initial examination: 5 patients were pregnant, 15 had positive serologic tests for syphilis, and 11 others had positive smear tests for gonorrhea (9 had a vaginal discharge). All of these patients were referred for evaluation and treatment. Most of their conditions were pre-existing; for example, one 13-year-old had been impregnated 3 months before by her adult boyfriend, who was later charged with statutory rape.

One 15-year-old became pregnant as a result of the sexual assault, and she and her mother became severely disturbed. The girl was placed under the supervision of a private physician, and, with the health department's assistance, arrangements were made for a therapeutic abortion. She was followed up by the school nurse, who reported that the girl was doing well at the end of the school term.

A 4-year-old girl who had a positive smear test for gonorrhea at initial examination became infected with primary syphilis after the assault. She was treated successfully. Gonorrhea developed in 13 other patients, and they were treated. (Prophylactic penicillin was not given routinely at the time of emergency treatment.)

Thirteen patients who became significantly disturbed were referred to private psychiatrists and public clinics. One was a 15-year-old who had been raped by a boy she knew and his brother. Three days after the assault she attempted suicide by ingesting seven aspirin tablets and preparing to drink a glass of ammonia. All of these patients are still under psychiatric supervision, except for a 9-year-old who was recently discharged when her mother refused to assist with the treatment procedures.

A total of 290 patients accepted the public health nurse followup service, and they were referred to various facilities for evaluation and

treatment. A number of patients were referred to more than one place. Thus, as shown below, 336 appointments were made through August 15, 1966, and 245 or 73 percent were kept.

<i>Place of referral</i>	<i>Number of referrals</i>	<i>Number of appointments kept</i>
District of Columbia Department of Public Health clinics . .	231	155
Venereal disease	116	87
Maternity	83	46
Pediatric	24	15
Mental health	7	6
Dental	1	1
Private physicians	59	46
Children's Hospital	32	30
Other hospitals	8	8
Other facilities	6	6
Total	336	245

The nurses discontinued followup for 165 patients because there was no evident need for medical or police followup, the patients were under the care of private physicians, the patients did not wish further services, or the patients had moved. Some of the cases were reopened when the patients called for assistance. Still being followed are 157 patients who need medical or psychiatric followup or who are being processed by the police or both. (Patients, especially children, being prepared for or undergoing court appearances are considered to be under significant emotional strain.)

The nurses have observed that the patients and their families are most receptive to the initial contact when it is made within 2 or 3 days after the alleged assault. There appears to be a definite need for emotional support at that time. The major concern of the patient and her family during the first month is the possibility of pregnancy and, secondarily, of syphilis. Also, the sexual incident itself or the fact that it is reported to the police seems to cause much stress for the family and frequently evokes submerged emotional difficulties. Some patients show emotional signs and symptoms, and some mothers express concern that their parental supervision has been inadequate.

Many patients telephone or visit the nurses to request information or help with other problems such as housing, finances, and health supervision for other members of the family. Many have had no previous contact with the health department, particularly those who have moved

to the District of Columbia within the year. Visits by the nurses uncover health and social problems often unrelated to the sexual incident.

The telephone calls decrease when the family begins to relax, which is usually soon after the patient menstruates and a negative serologic test for syphilis is reported. After 90 days, responsiveness to nursing followup usually decreases, unless an emotional problem has occurred or a court appearance is expected, and most patients and families express a desire to forget that the incident occurred.

During the 9-month period, the program required the entire time of one senior public health nurse and half of the time of one consultant nurse. The nine selected public health nurses spent about 5 percent of their time for follow-up. The members of the sex squad, particularly the two policewomen, devoted up to 5 percent of their time for discussions with the liaison nurse about individual patients.

Members of the clinic and administrative staffs at the District of Columbia General Hospital devoted about 500 hours to examination and treatment of victims, and the associate director for preventive services and the deputy director of the department of public health devoted about 250 hours for administrative direction and medical consultation.

In a letter to the health department, Chief John B. Layton of the Metropolitan Police Department stated:

. . . Since September 1965, when the present public health department program was inaugurated to provide followup medical and psychiatric care for victims of sexual assault, the value of this type of assistance has been evident in several ways. The program, as presently administered, demonstrates a human interest in the welfare of the victims, but more specifically, members of the sex squad have observed tangible benefits accruing from the services thus far provided. For example, sexual assault victims appear more composed and better prepared for the ordeal of a public trial. Victims are not as fearful and apprehensive regarding the possibility of pregnancy or disease after counseling by a health department representative. . . . Interviews and visits by the nurses have uncovered and tend to alleviate social and family problems of victims which, if allowed to develop and continue, could result in future police action.

As a result of the quality and scope of the services provided by the health department for victims of sexual assault, better public relations between members of the community and the police have developed as a side

effect. Victims and their families originally are in contact with the police and, when they subsequently receive assistance and guidance, the premise is established that the police have participated in the solution of their problems and are interested in the welfare of the citizens.

The National Picture

According to a report by the Federal Bureau of Investigation, 22,470 females in the United States, or 11.6 per 100,000 population, were forcibly raped or assaulted in 1965 (2a). The number of forcible rapes increased by 36 percent from 1960 to 1965. Of the seven offenses listed in the FBI's "Index of Crime," in 1965 the highest percentage of increase was shown for forcible rape; about two-thirds of the cases reported were actual rape and the others were attempted rape. The report states: "Many offenses of this type are not reported to a law enforcement agency primarily due to fear and/or embarrassment on the part of the victim." Although most reports of such offenses come from large cities, the suburban rates are increasing rapidly (2a).

The following standard metropolitan statistical areas showed the highest rates per 100,000 inhabitants in 1965 for forcible rape and assault (2b).

Los Angeles-Long Beach, Calif.....	32.9
Oxnard-Ventura, Calif.....	30.3
Galveston-Texas City, Tex.....	26.9
Detroit, Mich.....	26.8
Lansing, Mich.....	26.8
Bakersfield, Calif.....	25.7
Sacramento, Calif.....	24.9
Kansas City, Mo.-Kans.....	24.8
Flint, Mich.....	22.8
Chicago, Ill.....	21.6

The Washington, D.C., Metropolitan area reported 339 offenses, a rate of 14.2 per 100,000 population in 1965 (2b), and the District of Columbia 140 offenses, a rate of 17.3 (2c).

To learn whether other communities provided any services for victims of sexual assault, we sent inquiries to 17 city and county health departments, including those which serve the areas listed by the FBI as having the highest rates for 1964. Fourteen departments responded (Board of Health, Chicago; Allegheny County Board of Health, Pittsburgh; City and County Health Department, San Francisco; Maricopa

County Health Department, Phoenix; Atlantic County Health Department, Atlantic City; Health Department, Detroit; County Health Department, Los Angeles; Chatham County Health Department, Savannah; Health Department, Kansas City, Mo.; Health Department, Houston; City Health Department, Baltimore; Kansas City-Wyandotte County Health Department, Kansas City, Kans.; City and County Health and Hospital Department, Denver; San Joaquin Local Health District, Stockton).

Only four of the departments reported an organized effort by the police department to take the victim to a hospital or physician for examination and emergency treatment. None of the respondents reported having a formal program for nursing followup, and they also indicated that no specific community efforts were being made to provide medical and psychiatric assistance beyond the emergency service for women and girls.

Discussion

Our experience documents the fact that sexual assault is a significant medical and public health problem. During 9 months, 335 victims in the District of Columbia received emergency examination or treatment or both (as of September 15, 1966, this figure rose to 473). The public health nurses provided emotional support to many of these patients and insured that all patients who wanted or needed medical and psychiatric assistance received it. From the psychiatric viewpoint, even when sexual assault is imagined the complainant may need help.

The District of Columbia General Hospital is providing almost all of the emergency examination and treatment. However, voluntary hospitals have an obligation (which only the Children's Hospital is accepting) to provide this service, and private physicians who have cared for these patients previously have a similar obligation. Fear of having to testify in court seems to be the main deterrent for private physicians, but many patients went to them for followup and treatment.

Only the health department is in a position to provide public health nursing followup to see that medical and psychiatric assistance is obtained. The department does not need to pro-

vide the assistance, but may refer to and call on private physicians and voluntary hospitals.

A detailed epidemiologic analysis will be presented in another report. However, preliminary analysis indicates that the common picture of sexual assault, that of an adult woman raped by a strange adult, is far from being complete. About one-fourth of the victims were children 2 through 12 years old, and about one-half were under 17. Many of the children were assaulted by close relatives or other persons they knew—these are the victims who suffer the greatest emotional trauma. Most of the reported victims were nonwhite and medically indigent. Nevertheless, the societal disease of sexual assault may strike anyone.

We believe that only the health department is able to study the entire problem and see that a comprehensive program is carried out. In most communities the health department does not operate general hospitals, but it can obtain reports of initial examinations from them and from private physicians. The police department can do the same, but it cannot analyze the reports medically and epidemiologically. The health department is best equipped to analyze epidemiologically the sexual-assault incidents and the characteristics of the aggressors and victims, which is essential to determine preventive measures. The health department can also provide leadership to work with the police, education departments, and other agencies to institute preventive measures throughout a community.

The pilot program reported here was undertaken as a basis for a more comprehensive program for which Federal and voluntary funds are being sought. In the larger program, in addition to providing the services described, we hope to also carry out the following procedures.

1. Test methods of establishing the medical diagnosis of the incident, apart from the police classification, by determination of the diagnosis at the time of emergency service, or during subsequent visits of the nurses, or by psychiatric interviews, or by a combination of these.

2. Determine the epidemiology of sexual assault by such indices as rates of occurrence, by socioeconomic levels of victims, and by characteristics of known aggressors and of the victims.

3. Determine the procedures necessary for

complete medical, psychiatric, and nursing followup, and the cost of carrying out such a program.

4. Measure not only the immediate but the transitory and permanent physical and, particularly, emotional effects on health.

5. Determine from the study findings practicable preventive measures and institute these measures throughout the community to lessen the incidence of sexual assault.

Review of the Literature

A search by the National Library of Medicine of 381,000 citations in the international literature disclosed only 33 periodical titles under RAPE for the period March 1963 through January 1966. Most of these articles were either clinical or dealt with medicolegal aspects.

A review of *Index Medicus* from January 1957 through April 1966 showed that during that period none of the public health journals contained articles on rape. Also, none of the medical literature described epidemiologic aspects on any demographic basis, or community health and medical services for immediate care, or followup of victims for continued care. Literature on the prevention of sexual assault is sparse.

The best overview is given by Oliven (1), who describes the medical types of assault encountered, methods for immediate diagnosis and treatment, measures for medical followup, and possible outcomes. He states that death has followed assault, particularly among young children, and that permanent emotional damage may occur, especially among victims who have been provocative and among children who have been repeatedly seduced. Oliven describes precautionary rules for children and preventive measures which may be applied by various segments of the community.

In another comprehensive article written for family physicians, the psychiatrist Halleck stresses the important role they can play in giving immediate assistance and in referring victims for early psychiatric consultation and treatment (2). He indicates, however, that most victims, especially children, come from the lower socioeconomic levels which have no family physician. (In the District of Columbia, the

department of public health acts in this capacity.) Halleck feels that psychological equilibrium is always disrupted and that serious damage occurs frequently, particularly when personality disturbance or family disruption has existed previously, when assault has been invited, or when incest has occurred.

One of the few retrospective studies to assess outcomes was undertaken by Brunold (4). He calls the study a "simple" one, from which significant conclusions cannot be drawn. However, he concluded that 6 of 62 children suffered permanent emotional damage 15 or more years after the incident. Brunold believes that it is difficult to reduce the number of potential assaulters and that children may be protected by sex education and warnings by parents, schools, and family physicians. If parents are unable or unwilling to provide them, supervision and education must be provided by other sources.

Wells reviews her 27 years of experience as a police surgeon and classifies about 2,000 cases of sexual offenses (5). She feels that further emotional trauma can be prevented if the initial examination is made by a female physician assisted by a policewoman, and by improvement of court practices, such as hearing cases in chambers or in closed courtrooms.

De Francis makes a strong plea for social work protective services for "child victims of sexual offenses (who) are exposed to serious emotional damage, not only from the crime but from police questioning and court appearances." He states that only five or six Societies for the Prevention of Cruelty to Children in the United States have accepted such responsibility (6). He is conducting a research project to investigate the differences in consequences between a community with a well-developed service for child victims of crime and a comparable community lacking such protective services.

Summary

Women and girls are being sexually assaulted in large numbers and with increasing frequency, especially in large cities. Comprehensive health services for these often tragically neglected victims are needed in every community. Many health departments serving areas which had the highest rates for sexual assault in 1964 have indicated that they have no pro-

gram to provide the needed emergency care and followup assistance.

In September 1965 the District of Columbia Department of Public Health, which provides almost all emergency treatment for victims, initiated followup by public health nurses to determine if sexually assaulted females need psychiatric or further medical assistance.

During the first 9 months of the program, 322 women and girls were seen and questioned by the police department, given an initial medical examination, and referred to the nursing bureau. Their ages ranged from 2 to 88 years; 24 percent were under 13 and 53 percent were under 17. Only 13 percent were white. The sexual incidents varied from forcible "gang" rape by strangers to incest with the father to imagined assault.

Fourteen patients suffered severe trauma requiring emergency treatment, and four of these also required hospitalization. As a result of the assault, one 15-year-old became pregnant, one 4-year-old became infected with syphilis, and 13 other patients contracted gonorrhea. Thirteen patients became emotionally disturbed, and one of these attempted suicide.

A total of 290 patients accepted the public health nurse followup service, and they were referred to various facilities and private physicians for psychiatric and medical evaluation and treatment. As of August 15, 1966, 73 percent of the appointments were kept.

The nurses observed that emotional support during the first 3 months after the incident was particularly needed and appreciated by the patients.

Still being followed by the nurses are 157 patients who need medical or psychiatric followup or who are being processed by the police or both.

Epidemiologic analysis of the incidents, the aggressors, and the victims is necessary to develop community measures to prevent sexual assault.

REFERENCES

- (1) Oliven, J.: Sexual hygiene and pathology. Ed. 2. J. B. Lippincott Company, Philadelphia, 1965, pp. 55-71, 272-276.
- (2) Federal Bureau of Investigation: Uniform crime reports for the United States. Washington, D.C., 1965 (a) p. 9, (b) table 4, (c) table 51.
- (3) Halleck, S. L.: The physician's role in management of victims of sex offenders. JAMA 180: 273-278, Apr. 28, 1962.
- (4) Brunold, H.: Beobachtungen und Katamnestiche Feststellungen nach im Kindesalter erlittenen Sexualtraumen. Praxis V. 51: 965-971, Sept. 27, 1962.
- (5) Wells, N. H.: Sexual offenses as seen by a woman police surgeon. Brit Med J No. 5109: 1404-1408, Dec. 6, 1958.
- (6) De Francis, V.: Protecting the child victim of sex crimes. Publication No. 28, Children's Division, American Humane Association, Denver, Colo., 1965.

Pesticides Monitoring Journal

A new Federal journal devoted to information on pesticide levels relative to man and his environment will appear in June 1967. The *Pesticides Monitoring Journal* will be published quarterly under the auspices of the Federal Committee on Pest Control, composed of representatives from the Departments of Agriculture, Defense, the Interior, and Health, Education, and Welfare. Reports will deal only with data gathered from air, earth, water, food, and life by the various monitoring programs operated by the Federal Government, States, universities, hospitals, and nongovernment research institutions.

Pertinent data and interpretive articles are invited from investigators. Correspondence on editorial and circulation matter should be addressed to Editorial Manager, *Pesticides Monitoring Journal*, Pesticides Program, National Communicable Disease Center, Atlanta, Ga. 30333.