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INVESTIGATIVE TECHNIQUES

Michigan's Sexual Assault Evidence Kit: *An Effective Tool for Investigators*

The 1970's will most certainly be recorded as a time of active growth for the women's movement. One of the social issues raised by women around the country was the problem of rape and criminal sexual assaults. Extensive news coverage by the media made the American people aware that a problem did indeed exist and that a concerted effort would be required to combat it. Rape counseling centers and victim assistance programs became useful community resources for information on the subject of rape. Task forces to combat the problem of rape were formed to study methods of prevention, effective investigation, and prosecution techniques. Law enforcement officers were trained in methods of compassionately dealing with rape victims, while at the same time obtaining necessary investigative in-

formation. It was in this environment that the concept of a sexual assault evidence kit was formed.

By the late spring of 1975, it became increasingly apparent that one major area of potential investigative value had been neglected—physical evidence. This observation was made by the serology unit of the Michigan State Police Scientific Laboratory located in Northville, Mich. The primary function of a crime laboratory is the examination and comparison of physical evidence submitted by law enforcement agencies; no other segment of the criminal justice system deals more closely with

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physical evidence than the crime laboratory.

So it was logical that serologists from the laboratory would best be able to observe deficiencies in the quality of physical evidence submitted for their examination. Three recurring deficiencies were noted:

1. An insufficient amount of evidence was collected. This amounted to a single vaginal swab being submitted, or many times, a pair of woman's panties which bore a suspected seminal stain in the crotch area. Because of the potential quantity of material available which could have had evidentiary value, the submission of a single item of evidence for examination was simply not enough.
2. No standard comparison sam-

ples from the victim were submitted. Known hairs and blood or saliva from the victim would have been needed for comparison in the event that a hair or seminal stain of unknown origin were located. While it is true that these samples could have been obtained at a later time, an unnecessary delay in analysis could have been avoided by submitting known victim standards along with the questioned evidence of unknown origin.

3. In many cases, the evidence submitted was improperly packaged and preserved. A pair of panties with a moist stain in the crotch would have been submitted to the laboratory in a plastic bag. By the time the bag was opened, bacteria and mold would have destroyed all the biological materials of evidentiary im-

portance. Items of evidence were also submitted without being properly marked for later identification in court.

Sexual assault cases are unique in that the police investigator and crime laboratory scientist must rely on a third party, the examining physician, to collect and package the best evidence in the case, the evidence from the body of the victim herself.

The majority of evidence problems were attributable to medical personnel untrained in forensic science. The solution to the problem became obvious: Train the primary health professionals in the types of evidence to collect and provide them with all the materials to properly collect and preserve the evidence. This led to the design of the sexual assault evidence kit.

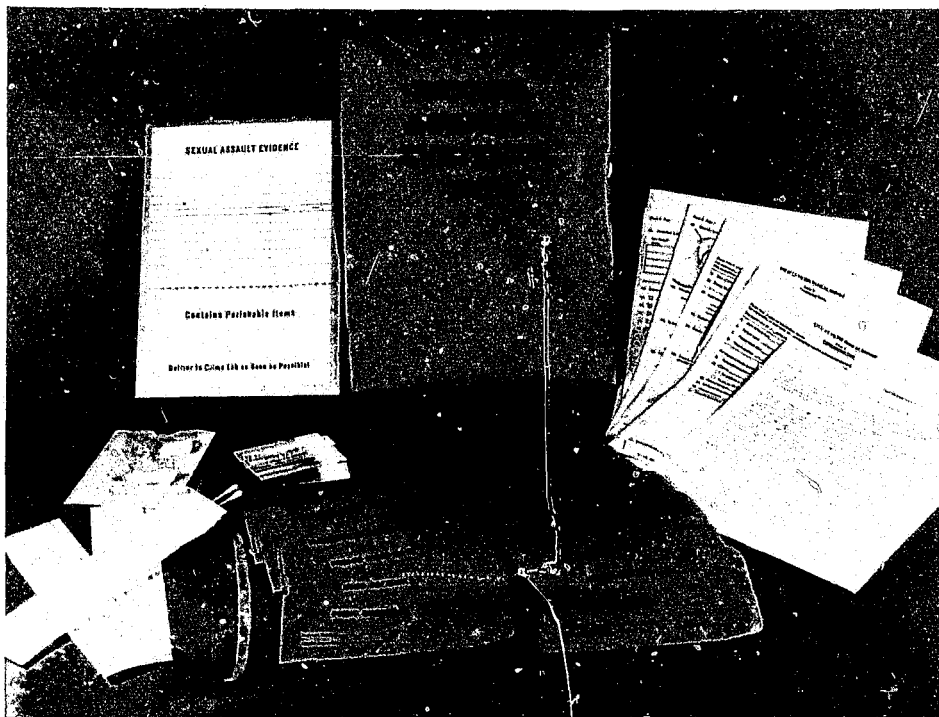
The Sexual Assault Evidence Kit

In designing the evidence kit, a number of factors were considered.

First, the kit should contain a simple set of instructions which the doctor could read and understand quickly. The instructions should include a list of items to collect and explanations of how to collect and preserve the evidence. In addition, a brief indication of what the crime laboratory could determine from the evidence is necessary. Second, the kit should contain all the items necessary for collection and preservation of evidence—envelopes, swabs, microscope slides, and other items. The hospital need only provide a collection tube for a whole blood sample and a bag for the victim's clothing, when appropriate. Third, the evidence kit should be cost-efficient. Since the kit is to be provided free of charge to hospitals, it is necessary to provide the most complete, practical kit for the least expenditure of limited funds.

With these considerations in mind, a prototype kit was produced and field tested at the University of Michigan

The sexual assault evidence kit



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Medical Center and Wayne County General Hospital. After approximately 8 months of testing, the contents of the kit were improved, based on advice from the medical personnel who used the kit and forensic serologists who analyzed the evidence in the test kits. The final production model of the kit contains the following items (see photograph):

1. One large paper envelope which forms the outer container for the kit.
2. One instruction sheet for the examining physician.
3. One set of multiple copy forms, composed of six different pages which become part of the hospital's medical records. Copies are also provided for the patient, the police, and the prosecutor.
4. One plastic comb for hair combings.
5. Eight glass microscope slides, frosted on one end.
6. Three packages of sterile cotton swabs, two per package.
7. Thirteen small preprinted envelopes, labeled with the type of evidence each contains. Also on these envelopes is a space for identifying initials of the doctor or nurse.
8. Two swatches of 100-percent cotton cloth, one for a blood stain and one for a saliva stain from the victim.

9. One lock-seal evidence envelope into which all the small, preprinted envelopes containing evidence will be placed. This envelope has a metal clasp lock in addition to the adhesive on the flap. Once closed properly, the envelope is secure against tampering.

Since the evidence received in the Northville Laboratory was usually hand-delivered, there was no need to make the kit mailable. However, to speed delivery of the evidence to the crime laboratory, the label on the lock-seal envelope warns the investigator that the kit “contains perishable items” that should be delivered to the crime laboratory as soon as possible.

All the items in the sexual assault evidence kit were available through departmental or commercial supply channels, with the exception of the assault victim medical report which is enclosed in each kit. The three-part, six-page form was designed by the staff of what is now the Assault Crisis Center of Washtenaw County, located in Ypsilanti, Mich. Development of this form was aided by suggestions from numerous law enforcement and medical personnel. The center has assisted in the successful spread of the evidence kits from the prototype stage and the education phases to the statewide distribution of the kits.

The financing of the sexual assault

evidence kit indicates the type of community support this kind of project can receive. In the early stages of the prototype period, the laboratory absorbed the cost of component parts of the kits, since most of the items were already on hand or readily available. However, as demand increased, it became apparent that the Northville Laboratory could no longer finance the program. This unfortunate fact was communicated to rape crisis centers and law enforcement associations during discussions about the fledgling program. The response was enthusiastic. The Wayne County Detective Association provided a donation of \$1,000 to supply kits for the county. The Detroit Rape Counseling Center budgeted for 2,500 kits. Civic groups and individuals contributed. A special account was set up in the State police headquarters, specifically to receive and disburse funds for the project. In early 1977, the assault crisis center included a special \$9,000 grant in their budget, specifically to finance the statewide distribution of sexual assault evidence kits. The program, which had originally begun as a means of improving the quality of evidence at a regional laboratory, was growing into a much larger project than anticipated.

Assembly of the Sexual Assault Evidence Kit

One aspect, which had yet to be considered, was the construction of

the kit. (It is one thing to compose a list of component items for a kit and another thing entirely to produce thousands.) The prototype kits were assembled by the author and staff members of the assault crisis center, at a private residence one afternoon. A total of 270 kits were assembled. As the prototype kits were depleted, a more efficient means of production was found. A policewoman from Dearborn Heights, Mich., offered the services of the Police Youth Organization. This group of youngsters from 12 to 15 years of age enthusiastically assembled about 1,000 kits in 2 evenings. Volunteer efforts of local groups can be used effectively on a project of this type. In order to actually assemble the kits, a number of subassemblies were required:

1. The various pages of the medical report form had to be collated.
2. The small preprinted envelopes had to be grouped in bundles of 13 envelopes.
3. The microscope slides had to be counted out.
4. A self-adhesive label was required for the evidence envelope.

These subassemblies were fed into a production line which added the remaining components and from which came completed evidence kits. The kits were then packaged in the various

cardboard boxes from which the components had come.

Distribution of the Sexual Assault Evidence Kit

Any program which has limited resources must plan for the most ef-

“Any program which has limited resources must plan for the most effective use of those resources.”

fective use of those resources. The limiting factors for the Northville Laboratory were finances and manpower. Another limitation which was self-imposed was a basic part of the distribution strategy: No hospital would receive any kits until the staff of their emergency room had been trained by a member of the crime laboratory's serology unit. This was to guarantee effective use of the kits.

Since the original concept of the entire program was a regional one, it was necessary to identify the hospitals in the laboratory's area of operation. A total of 45 hospitals were found in the area served by the laboratory, with an additional 30 hospitals in the city of Detroit. It was decided to concentrate on key hospitals, and train their emergency room nursing staffs, since nurses were more receptive to the program and more often available. This strategy worked well until demand for kits exceeded the manpower

limitations. Requests for kits grew out of training seminars, basic police academies, and in response to new releases concerning the program. Requests were received from all areas of the State of Michigan and from out-of-State as well. Sample kits have been sent by request to 20 different States and 2 Canadian Provinces. Since this indicated a high level of interest, it was decided to propose a statewide distribution of sexual assault evidence kits to the headquarters staff of the department of State police. After some modifications, a plan was developed by the department to make use of local State police post community service officers. These post community service officers were trained in district training sessions concerning all aspects of the evidence kit program. They, in turn, trained the emergency room nursing staffs of their local hospitals in the correct use of the kit. The officer then was responsible for supplying the hospitals with evidence kits by ob-

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taining stocks of kits from his district community service coordinator, who in turn acquired the kits from stockpiles at headquarters.



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The post community service officers received training in October 1977, and are presently training personnel and supplying their local hospitals.

Conclusion

The sexual assault evidence kit program in Michigan began as an idea

in a regional crime laboratory serology unit. The civilian laboratory scientists of this unit conceived, designed, and produced a kit which has helped members of the law enforcement community throughout the State.

Through the correct usage of the evidence kit, examining physicians can now gather all the available evi-

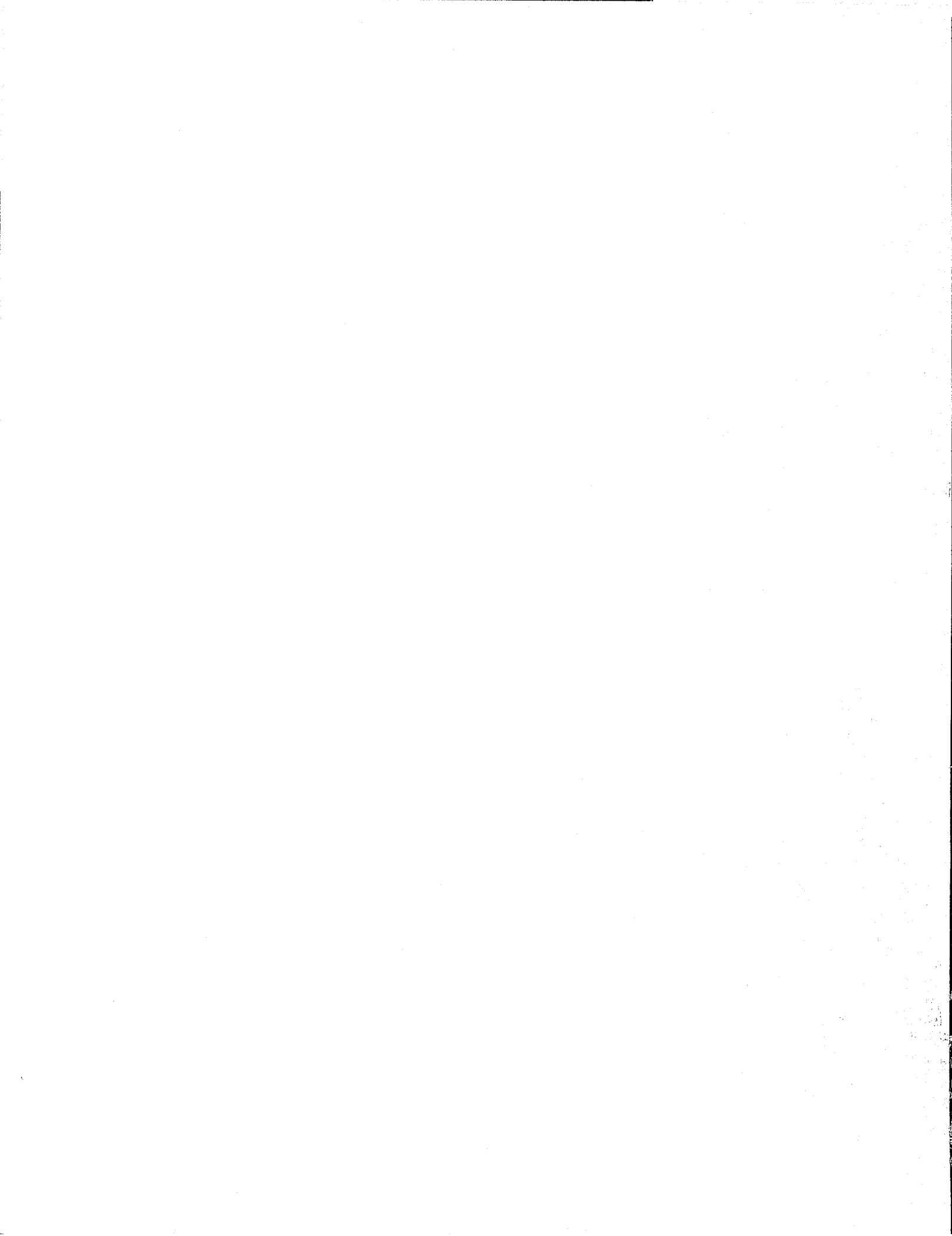
dence and preserve it properly for crime laboratory examination. Correct use of the assault victim medical report form also provides the physician with the best possible notes to refresh his memory at a court trial.

Crime laboratory personnel can thus examine evidence in an orderly manner, doing the most complete analysis possible. Since the evidence has been preserved correctly, delays due to caseloads do not impair the quality of analysis.

Prosecutors have used the evidence kit effectively in court, presenting their physical evidence in a neat, easily understood manner. The lock-seal evidence envelope has tightened the chain of custody considerably.

The victims of sexual assaults have benefited by not being constantly asked for additional hair, blood, or saliva specimens by the investigator. But most important, the people of Michigan have benefited by the intelligent use of resources available in most communities to combat a community problem. (M)

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