Emergency Contraception for Sexual Assault Victims in North Carolina Emergency Departments

Amy Tucker Woodell, MPH; James Michael Bowling, PhD, MA; Kathryn E. Moracco, PhD, MPH; Melissa L. Reed, MA

Abstract

Introduction: One in 5 women is a victim of sexual assault. This study examines the administration of emergency contraception to victims of sexual assault in North Carolina hospital emergency departments.

Methods: One hundred seventeen surveys were mailed to hospital emergency departments across the state to determine their emergency contraception practices for victims of sexual assault. The survey contained 11 questions about emergency contraception practices for victims.

Results: Of the 117 surveys, 103 were returned revealing that just over 50% of the hospitals in North Carolina treated victims with emergency contraception without exception. Both dispensing emergency contraception and providing information about emergency contraception were significantly associated with having a sexual assault nurse examiner program.

Conclusion: Results from this study demonstrate inconsistent provision of emergency contraception to victims of sexual assault; however, there is greater consistency of emergency contraception use by emergency departments using sexual assault nurse examiners.

Grants: None

Keywords: Contraception, postcoital; emergency nursing; rape

Pregnancy resulting from sexual assault is a traumatic experience, but it is preventable with emergency contraception, a high dose oral contraceptive that prevents pregnancy if taken within 120 hours after intercourse, often referred to as the “morning-after pill.” Emergency contraception cannot harm or terminate an established pregnancy.

Previous research has shown that hospitals do not consistently provide emergency contraception to victims of sexual assault. One study of emergency physicians found 8.4% would not prescribe emergency contraception to sexual assault victims. A 2002 national study of Catholic and non-Catholic hospitals by Harrison found that emergency contraception was not available at 55% of Catholic hospitals and 42% of non-Catholic hospitals. A report by Patel et al found that 55% of Pennsylvania hospitals had emergency contraception available onsite, and 37% offered both counseling for and provision of emergency contraception. Eighty-five percent of the 201 responding hospitals in a NY survey said it is their standard policy to dispense emergency contraception immediately, onsite, to all rape victims who choose it after having been counseled.

Nationally, 1 in 5 women reports being sexually assaulted at some point in her life. Timely provision of emergency contraception prevents the additional psychological and physical trauma an unwanted pregnancy may cause a victim of sexual assault. Five percent of rapes result in pregnancy. This translates to 25,000 rape-related pregnancies each year in the United States, 22,000 of which could be prevented with emergency contraception.

Accordingly, several medical professional organizations, including the American College of Obstetricians and...
Gynecologists, the American College of Emergency Physicians, and the American Medical Association have recommended that pregnancy prophylaxis, such as emergency contraception, be provided to victims of sexual assault.

Across the state, there are hospitals with sexual assault nurse examiners who are specially trained to provide care to patients who have been sexually assaulted including offering emergency contraception and collecting forensic evidence. Fifty-one percent of North Carolina hospitals have a sexual assault nurse examiner program.

In 2004, the North Carolina Coalition Against Sexual Assault, Planned Parenthood of Central North Carolina, and NARAL Pro-Choice North Carolina, under the umbrella organization of North Carolina Women United, investigated whether emergency contraception was available to sexual assault victims in emergency departments. The purpose of this exploratory study was to present point estimates of emergency contraception use across North Carolina hospitals and then to examine variation in use of emergency contraception by hospital characteristics.

**METHODS**

**Study Design**

Self-administered questionnaires were mailed to North Carolina hospitals with emergency departments. The 11-question self-administered questionnaire addressed emergency department policies for dispensing emergency contraception to sexual assault victims and giving referrals to sexual assault victims. Further, hospital representatives were asked, “Is it standard policy for the hospital to dispense emergency contraception onsite to sexual assault survivors?” Participants who responded affirmatively were classified as having an emergency contraception policy.

We also assessed the presence or absence of a refusal clause, or “conscience clause,” in the questionnaire. Responders that dispensed emergency contraception were asked, “Are there any exceptions to your policy based on the refusal of the provider on duty to dispense medication?” If hospitals did not provide emergency contraception or there were exceptions to their policy, they were asked if they provide prescriptions for emergency contraception or referrals to other providers.

Hospitals were also asked if they had a sexual assault nurse examiner program. Sexual Assault Nurse Examiners are defined by the North Carolina Coalition Against Sexual Assault as “specially trained Registered Nurses who perform a comprehensive evaluation and assessment, collect high quality evidence, and provide expert testimony in cases of sexual assault.” Developing a sexual assault nurse examiner program was not considered as having a program because there is not automatic intervention. In addition, emergency departments were asked if these nurses are available 24 hours a day, seven days a week.

Other data collected included the title of the staff person who completed the questionnaire, hospital name, number of sexual assault victims treated per year in the emergency department, and other questions regarding emergency department practices for the treatment of sexual assault victims.

Hospital size was dichotomized according to bed number based on the median of 143 beds. Hospitals were classified as being located in a metropolitan area, micropolitan area, or neither according to the US Office of Management and Budget definitions of 2003. A metropolitan area has at least one urbanized area of at least 50,000 people, a micropolitan has an urban center of 10,000-49,999 people, and unclassified counties have towns with fewer than 10,000 people. Metropolitan area is referred to as a large population and the micropolitan and “neither” areas were collapsed into one category for statistical analysis and referred to as a small population. Open-ended answers, such as title of hospital responder, were grouped and coded. Answers for “check all that apply” questions were each coded individually as checked or not checked.

**Setting and Selection of Participants**

Sample and setting were drawn from The North Carolina Hospital Association membership directory excluding hospitals without an emergency department, specialty hospitals, or psychiatric hospitals. Military hospitals (n=4), which are not NC Hospital Association members, were also included in the survey due to a particular interest in the policies of North Carolina military facilities by the survey sponsors. Hospitals were also excluded from the sample if they reported that they routinely transferred sexual assault victims to another emergency department (n=2).

Fifteen nonmember hospitals were not surveyed due to a lack of identifying information for these hospitals. Five of these nonsurveyed hospitals were specialty hospitals, and two others did not have emergency departments, leaving a possible 8 missed hospitals (2 with emergency departments, 6 unknown). Two questionnaires received from emergency departments belonging to hospital systems with one shared policy for the treatment of sexual assault victims were duplicated as representative responses for each of those emergency departments within those hospital systems. In all, we collected data from 117 eligible North Carolina hospital emergency departments. The NC Hospital Association directory data contained the names of hospital administrators, bed numbers, hospital ownership, and county location.

**Methods of Measurement**

We used data from the Emergency Care for Sexual Assault Survivors Survey collected in late 2004 and early 2005 by North Carolina Women United and the North Carolina Coalition Against Sexual Assault as well as supplemental information retrieved from the 2004 North Carolina Hospital Association Membership Directory. The University of North Carolina at Chapel Hill’s Office of Human Research Ethics Public Health Institutional Review Board (IRB) reviewed the application to complete a secondary analysis and determined that it was exempt from IRB governance.

The above mentioned questionnaire, Emergency Care for Sexual Assault Survivors Survey, was developed by the survey sponsors in consultation with Family Planning Advocates of New York state and pretested with 2 hospital individuals.
familiar with emergency department policies for sexual assault victims and 2 researchers with survey expertise. A questionnaire with a cover letter from the survey sponsors was mailed to each hospital’s chief executive officer, director of nursing, hospital attorney, and medical director of the emergency department. These 4 positions were sent questionnaires to replicate the protocol from the New York survey of emergency departments. Up to 3 calls were made to nonresponders and questionnaires were faxed to nonresponding hospital emergency departments. At the end of the questionnaire, participants could request that a listing of local rape crisis centers and sexual assault nurse examiners, a sexual assault and healthcare factsheet, and a factsheet about emergency contraception in the emergency department be sent to them.

After the data were collected and compiled, data entry was crosschecked with the original questionnaires for accuracy. When more than one questionnaire was received from a hospital (n=12), the questionnaire completed by the higher-ranking staff member (n=6) or the questionnaire filled out more completely was included in the sample (n=6). Comments written in the margins of each questionnaire were used for clarification of responses. Follow-up phone calls were made to allow hospitals to confirm their answers when inconsistencies were found for specific questions of interest. When these attempts to contact hospitals were successful, this resulted in modifications to original questionnaire responses to reflect the most accurate information.

Data Analysis

Data were analyzed using SAS System for Windows Version 8 (SAS Institute Inc, Cary, NC), and frequencies and chi-square analyses were performed.

### RESULTS

One hundred three hospitals responded to the survey for a response rate of 88%. More than half of these hospitals are privately owned. The number of beds in each hospital ranged from 6 to 989 with a median of 143 beds. Various staff from hospital emergency departments completed the questionnaires including directors of emergency departments, nurse managers and directors of nursing, registered nurses, sexual assault nurse examiner coordinators, sexual assault nurse examiners, clinical directors, medical directors of the emergency department, and emergency department managers.

The majority of hospitals reported treating 50 or fewer sexual assault patients each year; one hospital reported treating more than 200. Eighty-three percent of hospitals report that it is standard policy to provide information about emergency contraception to sexual assault victims. Seventy-four percent of hospitals dispense emergency contraception onsite to sexual assault victims as standard policy, but 9 of these allow exceptions based on the refusal of the physician on duty and 12 did not answer the exception question. This leaves 53% of hospitals dispensing emergency contraception onsite without exception. (See Table 1.) Seventy percent of hospitals report that emergency contraception is available 24 hours a day. Of the 27 hospitals for which it is not standard policy to dispense emergency contraception, 63% provide prescriptions and 60% refer to another provider. Eighty-nine percent of hospitals refer all sexual assault victims for follow-up counseling, and 88% reported referring specifically to a rape crisis center. Sexual assault nurse examiner programs are established at half of the hospitals, and more than half of these are available 24 hours a day, seven days a week. (See Table 1.) Hospitals with a sexual assault nurse examiner program are significantly more likely to provide information about emergency contraception (92% vs 72%; p<0.05) and to dispense emergency contraception (77% vs 46%; p<0.05) (see Table 2).

A significant association was also found between a hospital dispensing emergency contraception and its location in an area with a small population versus a large population. Hospitals in areas with small populations are less likely to have a standard policy to dispense emergency contraception compared with hospitals located in large population areas (45% small vs 74% large population hospitals; p<0.05). (See Table 2.) Hospitals located in small population areas were less likely than those in large population areas to have a standard policy to provide information about emergency contraception (78.6% vs 86.3%). This association, however, was not significant (p>0.05).

Hospitals in large population areas were more likely to have sexual assault nurse examiner programs. In areas with large

| Table 1. Hospital Policies and Services for Victims of Sexual Assault (n=103) |
|-------------------------|----------|-------|
| Hospital Policies        | N (%)    |       |
| Standard policy to dispense emergency contraception onsite without exception | 55 (53) |
| Standard policy to dispense emergency contraception with exceptions | 9 (9) |
| Standard policy to dispense with unknown exceptions* | 12 (12) |
| Not standard policy to dispense emergency contraception | 27 (26) |
| Hospital Services        | N (%)    |       |
| Have sexual assault nurse examiner coordinator** | 52 (51) |
| Have sexual assault nurse examiner coordinator available at all times*** | 28 (56) |

* Due to missing responses to exception question
** Sample size of 102 for this question due to 1 missing response
*** Sample size of 50 for this question due to 2 missing responses
populations, 60.8% of hospitals have sexual assault nurse examiners, and in areas with small populations, 41% have sexual assault nurse examiners (p=0.05).

Limitations

There were several limitations to this study. One potential limitation is that not all hospitals with emergency departments were included; 19 hospitals were not NC Hospital Association members at the time of this survey. However, at most, only 8 of these could have been eligible for this study, which would have resulted in a response rate of 82%. Of the hospitals that did respond, there were several cases in which data were missing due to incomplete data. Item nonresponse occurred on questions regarding how many sexual assault survivors were served (n=1), whether or not the hospital allows exception to their policy to provide emergency contraception based upon the provider on duty (n=12), the availability of emergency contraception 24 hours a day (n=11), the presence/absence of a sexual assault nurse examiner program (n=1), and availability of a sexual assault nurse examiner program 24 hours a day (n=2). However, the strength of the survey was the overall high response rate.

Questionnaires were not anonymous; therefore, responders may have been influenced to answer questions in ways they deemed to be more socially acceptable to the survey sponsors, particularly the North Carolina Coalition Against Sexual Assault. However, survey questions focused on hospital policies and services, not on personal attitudes or behaviors; therefore, the level of social acceptability bias influencing survey responses should be minimal. Personal bias or interpretation poses another question about reliability and validity of the instrument as well as the study.

Different hospital staff members responded to the survey, which may affect the comparability of responses. However, because the information requested was on hospital policy, respondents’ differing positions should not have greatly influenced variability in responses. The method of follow-up phone calls introduces the possibility of a mixed-mode effect to responses, as the original survey was a written questionnaire.17

**CONCLUSION**

In North Carolina, a little more than half of hospitals dispense emergency contraception without exception. Both dispensing emergency contraception and providing information about emergency contraception were significantly associated with having a sexual assault nurse examiner. Almost all hospitals that operate emergency rooms offer information on emergency contraception to victims of sexual assault, and most refer victims to some form of counseling. In addition, hospitals in metropolitan areas were also more likely to dispense emergency contraception.

Our findings indicate that timely access to emergency contraception may be limited by hospital policy and practices. For example, it is of concern that in the one-quarter of hospitals that did not dispense emergency contraception onsite, one-half provided either a referral to another provider or a prescription, measures that are not considered adequate alternatives to dispensing onsite, particularly for a time-sensitive treatment such as emergency contraception. Previous research by Harrison6 found most referrals provided by hospitals that did not provide emergency contraception were ineffective. Furthermore, in this study, 14% of the hospitals that dispense emergency contraception had exceptions based on the preference of the physician on duty, which could also limit timely access to emergency contraception.

This study’s results indicate that emergency departments should (a) change hospital policies to meet the needs of the victim rather than the preference of the provider by creating standing orders so that emergency contraception can be provided regardless of the physician on duty and (b) institute sexual assault nurse examiner program affiliation or training to ensure that treatment for sexual assault includes pregnancy prevention prophylaxis. Hospitals, particularly those in rural areas, would benefit from having sexual assault nurse examiners, preferably

---

### Table 2.
**Relationship Between Hospital Emergency Contraception Policy and Presence of Sexual Assault Nurse Examiner Program and Population Size (n=91)**

<table>
<thead>
<tr>
<th>Hospital Characteristic</th>
<th>Hospitals with a policy to dispense emergency contraception</th>
<th>Hospitals that allow exceptions</th>
<th>Hospitals that do not dispense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual assault nurse examiner program*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, No. (%), n=43</td>
<td>33 (77)</td>
<td>4 (9)</td>
<td>6 (14)</td>
</tr>
<tr>
<td>No, No. (%), n=48</td>
<td>22 (46)</td>
<td>5 (10)</td>
<td>21 (44)</td>
</tr>
<tr>
<td>Population Size*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small, No. (%), n=44</td>
<td>20 (45)</td>
<td>5 (11)</td>
<td>19 (43)</td>
</tr>
<tr>
<td>Large, No. (%), n=47</td>
<td>35 (74)</td>
<td>4 (9)</td>
<td>8 (17)</td>
</tr>
</tbody>
</table>

* p-value < 0.05 based upon chi-square test of association between emergency contraceptive policy and hospital characteristic
available 24 hours a day, to ensure that sexual assault victims receive the optimal complement of services.

Several states have taken legislative action to ensure the provision of emergency contraception for sexual assault victims. As of October 2006 11 states\(^a\) required emergency departments to provide emergency contraception-related services or information to sexual assault survivors. Two bills introduced during the 2007-2008 NC General Assembly session (House Bill 961 and NC Senate Bill 968) would require North Carolina hospitals to provide emergency contraception onsite to sexual assault victims in emergency departments. However, measures must be taken to guarantee that any policies and legislation put into place are adhered to and fully implemented.\(^{NCMJ}\)

Acknowledgements: Thank you to North Carolina Women United and the North Carolina Coalition for Sexual Assault for sponsoring the research study. Also, special thanks to Margaret Mathes for her assistance in editing and formatting this paper.

**REFERENCES**


\(^a\) States requiring emergency departments to provide emergency contraception-related services or information to sexual assault survivors as of October 2006 include California, Illinois, Massachusetts, New Jersey, New Mexico, New York, Ohio, Oregon, South Carolina, Texas, and Washington.