ORIGIONAL ARTCILE

Emergency contraception provision for sexually assaulted women at health facilities in Addis Ababa, Ethiopia

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Abstract

Background: *There is a real challenge of emergency contraception (EC) provision at health facilities in Addis Ababa, Ethiopia.*
Objective: *The aim of the study was to assess EC provision for sexually assaulted women (SAW) during medical evaluation time.*
Methods: *The study employed both qualitative and quantitative methods of data collection. It focused on five health facilities where SAW in Addis Ababa and its environs were managed in 2005. A structured questionnaire was used to review the medical records of SAW attending these facilities, and who faced the risk of unwanted pregnancy. In-depth interviews with health care providers and selected SAW were also conducted.*
Results: *Out of the 384 cases included in the study, 28.4% were provided with EC. Fifty-five percent of the cases were evaluated within the first five days of the incident. Thirteen percent had already conceived by the time they were evaluated. All the five health facilities considered sexual assault as an emergency. Among the reasons for failure to report early were: threat from the assailant, financial constraints, abduction, and the lack of services in the nearby health facility. Some of the conditions that prompted rape survivors to report early to health facilities were presence of visible trauma, excessive bleeding from genitalia and fear of acquiring HIV.*
Conclusions: *In order to improve EC provision, the necessary efforts have to be made by key stakeholders. Moreover, to provide appropriate medical care including counseling for SAW, regular training has to be organized for service providers.*

Keywords: *sexual assault, risk of pregnancy, emergency contraception.*

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Introduction

Sexual assault is the fastest growing but the most under-reported violent crime in the world. It comprises 6% of all global crimes (1). Although its actual incidence is unknown, it is estimated that sexual violence increased by ten- fold between 1960 and 1994 (2, 3). In the USA, 44% of women are victims of attempted or completed rape 50% of these victims were attacked more than once (3). Generally, only 10% of assaults are reported to police, and only 18% seek medical care (4, 5).

For women aged 21 and under, the risk of sexual assault is estimated at 1 in 5, while women of college age face a 1 in 4 risk, and the lifetime risk stands at 1 in 3 (4). Seven percent of junior high school students and 12% of high school girls are sexually abused (5). In Ethiopian high schools, the prevalence of completed and attempted rape is 5% and 10% respectively (6). Sexual assault is not simply a sexual act but a violent act inflicting physical and psychological injuries, with approximately 1% ending in homicide (7). Non-genital injuries occur in 20-50% of the victims. Grossly visible genital injuries are present in 10 to 30% of victims, and most authors recommend colposcopy, which increases the yield to more than 90% (8, 9).

Worldwide, 50 million pregnancies are terminated each year. The unplanned pregnancy rate is much higher, constituting up to 90% in teenagers (10). The contribution of sexual assault to unplanned and unwanted pregnancy is substantial. Eighteen percent of unwanted pregnancies in Ethiopia are the result of rape (11). In Ethiopia, pregnancy occurred in 17% of rape survivors (6).

Among rape cases reported to hospitals in Addis Ababa, vaginal penetration and attempts at penetration constitute the major forms of assault, accounting for 97.4% of all cases. More than three-quarters of the rape survivors were aged between 11 and 25 years. Almost all, at 99%, had no previous sexual experience. The mean reporting time at hospitals was 18.4 days after the assault. Two-thirds of the survivors reported after 48 hours, and delays of more than one month were not uncommon, seen among 14.4% of the victims (12).

Medical personnel are required to provide certain services to rape survivors when they present for medical care. Alongside the prevention of pregnancy, these services include the collection of forensic evidence, and the management of injuries, sexually transmitted infections (STIs) and psychological trauma. For fertile women, the risk of pregnancy after a single unprotected act of intercourse is 1-8% (13, 14). Emergency contraception (EC) is a method used to prevent pregnancy after unprotected sexual intercourse, but before pregnancy is established (15, 16).

The objective of this study was to address the effectiveness of EC services offered to sexually assaulted women (SAW)at the time of their seeking medical care in five health facilities in Addis Ababa. The study is intended to provide information relevant to essential programmatic issues, such as whether sexually assaulted women present themselves early to become eligible for EC use whether EC pills are available at the time of seeking medical care; reasons for delays; and to what degree the health services are prepared for the challenges of EC provision.

Materials and Methods

The study employed both quantitative and qualitative methods. A structured questionnaire was used to review all available medical records at five health institutions providing medical care to SAW in Addis Ababa and its vicinity. In-depth interviews of health care providers and SAW were used to assess various issues and processes in EC provision, and its utilization after sexual assault.

The study was undertaken in Addis Ababa, Ethiopia, which has a population of approximately 3.5 million. There are over 500 health facilities in the city, which include 30 hospitals, of which 17 are private and 13 public. SAW in Addis Ababa and its vicinity can receive medical care in five of these hospitals. Three are teaching hospitals: Tikur Anbessa (TAH), Gandhi Memorial (GMH), and St. Paul's (SPH); one is a non-teaching hospital, Yekatit 12, and another the Family Guidance Association of Ethiopia (FGAE) model clinic. All survivors of sexual assault that presented to these facilities from January 1, 2005 to December 31, 2005 were considered as eligible for the study.

The inclusion criterion for the study was a SAW facing a risk of pregnancy. The exclusion criteria included the non-reproductive age group, and women who were pregnant at the time of the assault.

In-depth interviews were conducted with health providers involved in the care of rape survivors In order to gain insight to the perspective of the SAW, in-depth interviews with 25 SAW who presented themselves at the five institutions were also conducted. For the quantitative study, data entry and analysis was performed using EPI INFO version 2002; while the interviews were analyzed as case studies.

The structured questionnaire was anonymous and confidential, and was completed by medical staff of the respective health facilities. SAW for interview were all briefed about the study and verbal consent was taken before proceeding with the interview.

Ethical clearance was sought from the Research and Publication Committee of the Obstetrics and Gynecology Department, Faculty of Medicine, Addis Ababa University. The medical directors and heads of out-patient departments of the health facilities were informed and permission obtained.

Results

There were a total of 791 SAW seen at the five health facilities, and 384 (48.5%) were at risk of pregnancy at the time of the sexual assault. Table 1 describes the socio-demographic characteristics of the respondents. Ninety percent of the women were from Addis Ababa. The mean age was 17 years and the median age 16 years. Fifty-five percent of the cases either had no formal education or elementary education and 82% were single.

Over 28% (n=109) of the SAW were provided with EC. The most common EC method provided was Postinor-2 (n=67, 61.5%) while combined pills accounted for 19.3% (n=21) of the methods. An intrauterine contraceptive device (IUD) was provided to two women (Table 2).

Table 1: Socio-demographic characteristics of sexual assaulted women at risk of pregnancy seen in Addis Ababa health facilities, 2005 (n=384).

Category	Frequency	Percentage
Address		
Addis Ababa	348	90.6
Out of Addis Ababa	33	8.6
Unknown	3	0.8
Age		
<15 years	76	19.8%
15-19 years	238	62%
20-24 years	50	13%
25-29 years	12	3.1%
30-34 years	6	1.6%
35-39 years	1	0.3%
40-44 years	1	0.3%
Marital Status		
Single	314	81.8
Married	12	3.1
Divorced	15	3.9
Widow	4	1.0
Others	39	10.2
Education		
No formal education	71	18.5
Elementary	149	38.8
High school	36	9.4
College / University	3	0.8
Unknown	125	32.6

Table 2: Emergency Contraception, by type, provided to SAW at risk of pregnancy seen at health facilities in 2005, Addis Ababa, Ethiopia (n=384)

EC provision and type	Sexually Assaulted Women
EC provided	109 (28.4%)
Levonorgestrel	67 (61.5%)
COC 4 tab 2 doses	16 (14.6%)
COC 2 tab 2 doses	5 (04.6%)
IUD	2 (01.8%)
Unknown EC method	19 (17.4%)
EC not provided	275 (71.6%)

In 333 of the 384 cases, the time interval between assault and report to health facilities showed that 25% (n=83 of 333) of cases reported to health facilities within 24 hours of the incident and 55% (n=183 of 333) within 120 hours. The average time of reporting was 34.6 days, the range being 2 hours to 2 years (Table 3).

Of the 183 cases who reported within 120 hours of the assault, 40% (n=74) were not supplied with EC. Fifty-one percent of cases were reported to health facilities within the first 48 hours of reporting to police, and 2.6% (n=10) reported to police after they were seen in health facilities (Table 4).

Thirteen percent (n=50 of 384) of the assaults were already pregnant at the time they reported to a health facility.

In-depth interviews were conducted with 22 SAW . The age range was 13-21 years and the average age was 15.3 years. Seventeen were from Addis Ababa, two from Bishofitu (45 kms from Addis), and one each from Akaki, Sandafa, and a Somali refugee. Several cases reported first to a police station, and obtained a police paper that they then presented at a health facility. Others reported initially to a health facility for a "virginity" check-up before involving the police.

Table 3: Time interval between occurrence of sexual assault, and reporting to police stations and health facilities in Addis Ababa, 2005.

Time interval between incident and reporting	Reported Institutions			
	Health Facility		Police Station	
	Number	Percentage	Number	Percentage
1 day	83	21.6	88	22.9
2 days	35	9.1	23	6
3 days	28	7.3	19	4.9
4-5 days	37	9.6	13	3.4
6-30 days	74	19.3	44	11.5
>1 month	82	21.4	52	13.5
Missed value	51	13.3	145	37.8
Total	384	100	384	100

Table 4: Time interval between reporting to the police and reporting to health facilities, Addis Ababa, Ethiopia, 2005.

Time interval	Number of cases	Percentage
<48 hours	196	51.0%
48-72 hours	17	4.4%
73-96 hours	10	2.6%
>96 hours	18	4.7%
Police paper not found	133	34.6%
First seen at health facility	10	2.6%
Total	384	100%

Reporting times ranged from two hours after the assault to 100 days, in the case of two women. Fifteen of the 22 cases visited a health facility within five days of the assault. Three were referrals from the other centers, while one was a self referral after receiving disappointing service at the first clinic visited. A woman who presented 74 days after the initial assault had been kept forcibly captive by her assailant. Twelve of the women were issued with EC after reporting to a health facility; however, three women did not receive EC even though they reported within 120 hours of the incident.

Reasons for timely presentation to health facilities included major trauma, fear of sexually transmitted infections, including HIV; and strange assailants and gang rape. Meanwhile, reasons cited for late presentation included threats by the assailant; financial constraints; abduction; and the perceived inadequacy of the police certificate.

At the Family Guidance Association of Ethiopia (FGAE), services for sexual assault survivors are available only during working hours, from 8:00a.m to 5:00p.m in the week days and from 8:00a.m to 12:00pm on Saturdays. Each of the health facilities, with the exception of FGAE, involved in the study provided services to SAW at any time of the day and week on an emergency basis. With occasional exceptions, when the staff member responsible failed to refill the kit, EC pills (Postinor-2) were available during all working and emergency periods. On arrival at the health facilities, the SAW were treated based on their complaints and a paper from police was not mandatory.

The primary care givers were general practitioners at Yekatit 12 hospital and FGAE, and gynecology residents in TAH, GMH, and SPH. Occasionally trained nurses are asked to participate in the primary care at FGAE.

Discussion

Sexual assault is a criminal act that victims frequently suffer alone learning all its physical, sexual, and psychological consequences. Cases where the assailant was unknown to the victim, and where physical injury was present, are significantly associated with police involvement in rape cases (2).

In this study, these factors are associated additionally with early presentation to a health facility, besides frequent police involvement. Of those reporting to health facilities, approximately 48% presented within the first five days (120 hours) of the assault.

The interval between a sexual assault and presentation to a health facility ranged from two hours to nearly two years after the incident, with 20% of survivors taking between six and 30 days to report. The frequency of presentation beyond the window of opportunity for the collection of forensic evidence compromises the ability of health staff and police personnel to respond adequately to each incident. It also means that substantial proportion of rape survivors are not eligible for receiving EC, and thus are unable to protect themselves against pregnancy.

In addition, the long interval between incident and presentation lessens the likelihood of the survivor obtaining a certificate, which is often their primary objective (12). In this study, only 21.6% of survivors presenting at the health facility had fresh genital lesions, and spermatozoa was detected in just seven cases. An earlier study conducted in two hospitals in Addis Ababa found an average time interval of 18.4 days between sexual assault and presentation to the health facility. The average time interval in this study is 34.6 days; an almost twofold increase. Two-thirds of the cases reported after 48 hours of the assault in the previous study in Addis Ababa (12). Our study also showed similar findings, as only 30.7% reported in the first 48 hours.

The 72 hours deadline for EC has been challenged as evidences are available supporting its use in up to 120 hours (17) and the trend is being adopted in our situation as well. Of the 183 cases who reported within 120 hours of the assault, 60% (n=109) were provided with EC, while 40% (n=74) were not. Thirty three women presented after 72 hours but within 120 hours, of whom 13 were issued with EC. At the time of this study, the window of opportunity for EC provision was widely held to be 72 hours after sexual intercourse. This time interval has now been revised upwards to 120 hours (5 days) by the WHO and International Consortium of EC (ICEC).

Those presenting late for EC provision should be briefed about EC in the event of a repeat request, of which a frequency as high as 50% is being reported (15), to prevent similar delays in the future. The high proportion of eligible women (i.e. reporting within 120 hours and not already pregnant) not receiving EC indicates the alarming extent of missed opportunities. The quality of EC service provision is also occasionally inadequate, with incorrect dosages being observed. Although the efficacy of EC is not 100%, no single case has reported back with failure of the provided contraception in the study period, which reflects perhaps inadequate follow up of clients.

We have seen that 50 women were pregnant by the time they reported, and considering the 5% chance of conception from an assault, this suggests that thousands of women are silent victims not reached by our study. Some of the sexual assault cases reported early because of the fear of acquiring HIV, and were screened and became sero-negative. The sero-status of the assailant is not known but considering the sexual behavior and the prevalence of HIV in this part of the world, the worry of the victims is not something to be ignored.

Health facilities involved in the management of sexual assault cases are providing the service on an emergency basis; referral or a police paper is optional.

The majority of sexual assault cases initially report to a police station, and are referred onwards by the police for a medical check- up. Threats from the assailant, abduction and financial constraints are some of the reasons behind the delay in seeking medical care. Visible external injury, fear of HIV transmission, and an unknown assailant were associated with early reporting.

Besides the impact of the delay on EC provision, the managing clinicians failed to supply the EC to 40% of cases who presented within 120 hours of the assault. We observed a few cases (n=13) being supplied with EC between 72 hours and 120 hours. Follow up was very poor and only 23 cases appeared for HIV retesting after the sixth month. One of the two cases for whom an IUD was inserted didn't show up even after a year. For EC to be effective, the timing and proper dosage of the approved drugs is mandatory.

There is a significant delay in seeking medical care, and such missed opportunities would have prevented unwanted pregnancies and produced timely evaluation results to legal bodies. Those involved in the management and care of sexual assault cases need on-job training about the effective provision of EC, including timing, options and dosage. Further studies need to be conducted to assess the reasons behind poor follow up and to improve care of the sexual assault survivors.

Acknowledgements

This study was financially supported by Population Council (*ECAfrique)* through the Ethiopian Society of Obstetricians and Gynecologists (ESOG). The authors are grateful for the financial support provided for the study. The authors also thank those who were involved in data collection, chart searching and arranging assault cases for in-depth interview.

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