# POSTABORTION CARE SERVICES AT KENYATTA NATIONAL HOSPITAL

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## Abstract

**Background:** Postabortion care is a major safe motherhood strategy to combat maternal mortality and morbidity and lists among many service delivery policies and standards of reproductive health care. The 1994 international conference on population and development held in Cairo recommended emergency care for abortion complications and prompt provision of postabortion counseling, education and family planning services. The ministry of health in Kenya has approved a national expansion program that integrates postabortion care training and services with other reproductive health care. At Kenyatta National Hospital (KNH), it has been noted that death from abortion complications accounts for about 22.2% of all maternal deaths. It has also been observed that 43% of postabortion patients lack knowledge in family planning. It is therefore necessary to assess the current postabortion care services to be able to improve on the gaps on this important safe motherhood strategy.

**Objective**: To assess postabortion care services at Kenyatta National Hospital (KNH)

**Study design**: This was a cross-sectional survey

**Results:** Most of the patients were in the high fertility age group of 20-29years forming 62.2% (230), while 67% (248) were of low socio economic status and teenagers (10-19) were 10.5% (40). Postabortion counseling for family planning was low- 15.1% (56). Quality of postabortion emergency treatment was not good as 38% (134) had to wait for more than 6hours for emergency evacuation while 89% (252) were not informed of their diagnosis. However over 75% of abortions were managed correctly as per gestational age. Postabortion referrals to other reproductive health services was low, only 11.4% (52) were referred with only 1.6% for pap smears and only 27% (12) for family planning. For the proportion referred, 88% (46) of referrals were done verbally.

**Conclusion**: The postabortion care was poor. The low rate of counseling for family planning was similar to previous surveys. Poor postabortion care contributes significantly to high maternal mortality thus it must be improved urgently.

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**Key words:** Postabortion family planning, emergency treatment and referrals

**Introduction**

Maternal mortality and morbidity stemming from abortion complications are almost wholly preventable through existing means .[1] Abortion is defined as the termination of pregnancy, either spontaneously or deliberately, before the fetal viability is achieved i.e. before the fetus attains the weight of 500 gm and above, which corresponds to about 20 weeks gestational age from the last normal menstrual period.

In order to reduce the risk of long term illness or disability, and death, to women presenting with the complications of unsafe abortion, health care systems must provide easily accessible, quality postabortion care at all service levels. Currently, emergency postabortion care is provided mainly in higher level district hospitals. Not only does this lead to the high cost of providing these services, but it makes them inaccessible to many women. The prevention of abortion – related illness and mortality is dependent on the availability of emergency postabortion care in the health care system. Whether it is health information and education, stabilization and referral, uterine evacuation, or specialized care for the most severe complications, at least some components of emergency care must be available at every service delivery site in the health care system which should be applicable to both public and private sector health providers [2, 3.]

It is estimated that the incidence of abortion for the whole world is 15-20% [4], and that between 30 to 50 million abortions take place annually, more than half of them in the developing countries[5]. A significant number of women arrive in the hospital with complications from spontaneous abortions and approximately 70,000 women die annually from complications related to unsafe abortion [6]. Previous studies in Kenya have indicated a high incidence of abortion. It has been reported that about 60% of acute gynecological admission in Kenyatta National Hospital are due to abortion[7-11].

At other hospitals in Sub-Sahara Africa, abortion has been reported to account for a large number of gynecological admission with figures ranging form 10% to 28% being quoted [4, 12-14]. The trend of abortion is on the increase worldwide because of the increase in sexuality among women in the reproductive age group [14, 15]. In Asia and Middle East, these women are usually older, married and of high parity and not wanting anymore children [5]. In Africa, this is more in the adolescents, many of whom tend to involve themselves in unprotected coitus[8, 9, 12-15.]

This has been demonstrated in studies done previously in Kenya and elsewhere, which have shown that sexuality among women is on the increase particularly among the young, unmarried and low parous and especially so among the adolescent [8-15]. It has been shown that sexual activity among adolescents start early [9, 15].

In some countries abortion accounts for 50% of pregnancy related deaths [2] and according to recent World Health Organization estimates, up to 15% of pregnancy – related mortality worldwide is due to abortion [3.] Due to the high maternal mortality attributed to abortions and postabortion complications, a comprehensive postabortion care services should include both medical and

preventive health care. The key elements of postabortion care are: emergency treatment of incomplete abortion and potentially life-threatening complications, Postabortion family planning and counseling services, links between postabortion emergency services and other reproductive healthcare system and community involvement.

There is high maternal mortality and morbidity attributed to abortion and postabortion complications in many developing countries like Kenya, thus comprehensive postabortion care services should include both medical and preventive health care. There is need to link emergency treatment in postabortion care to the family planning services, counseling services and other reproductive health services thus improving safe motherhood strategy.

In Kenya, studies done previously at Kenyatta National Hospital have shown that deaths from abortion complications account for about 22.2% of all maternal deaths [16], 43% of postabortion patients were not using contraceptives due to lack of knowledge or non availability [15]. It has also been observed but not qualitatively assessed that at Kenyatta National Hospital follow up services are only offered to post partum mothers but rarely to post abortal patients after discharge post evacuation except for the post laparatomy patients [15]. The women hospitalized for abortion and its complications are treated and discharged as rapidly as possible and rarely offered any quality postabortion counseling[15]. Their other reproductive health problems are rarely given priority[15].

It is with this in mind that this study was designed to assess current postabortion counseling and services at Kenyatta National Hospital to form a basis of recommending quality provision of this vital care in order to reduce maternal morbidity and mortality.

**Materials and methods**

This was a cross-sectional survey done at Kenyatta National Hospital in the

acute gynecological ward from October 2002 to January 2003. This is the ward where all cases of abortions including complications are admitted. Other acute gynecological emergencies are also admitted here including ectopic pregnancies, acute pelvic inflammatory disease, bartholins abscesses, acute hemorrhage from any other gynecological cause or complications. In this ward, there is an evacuation room where patients with incomplete abortion have evacuation of the uterus done by aspiration using Karman's Cannula. The patients are discharged the same day or the following day with an exception of those with abortion complications who would stay longer for further management.

Other services for acute gynecological complications which do not require main theatre are also offered here. Postabortion counseling services are ideally supposed to be offered here also. The interviews were done on alternate days and excluded all patients who declined to give consent and those managed for abortion and associated complications but were not yet discharged from the ward.

A structured questionnaire containing open and closed ended questions on socio-demographic characteristics, reproductive history and postabortion care received during the current abortion was used. The questionnaires were filled by direct interview of each participant in a private room after discharge. During the interview the patients were allowed to ask any questions they wished to ask regarding postabortion care or reproductive health in general. From their discharge summaries, the treatment received and referrals made were noted. Also the discharge diagnosis was recorded. Quality of postabortion emergency treatment was determined by estimating time taken before treatment is offered which should be within 2hours of diagnosis but for the purpose of this study less than 5 hours is used , that is from the time of arrival to hospital to when treatment is received which takes into account registration process before seeing a doctor. Also considered for quality was the provision of emergency evacuation and provision of information on the diagnosis. For the patients residing in Nairobi, location of their residence was used to classify them into low,middle and high socio economic status. For example those residing in Kibera, mathare were grouped as low socio economic status, Nairobi west, Madaraka as middle socio economic status and muthaiga, Lavington as High socio economic status. SPSS version 11 was used to analyze the data, the level of significance was at 95% confidence interval ($p<0.05$ was statistically significant). The KNH ethics and research committee approved the study.

## Results

### Socio demographic characteristics

A total of 370 patients admitted for post care in the acute gynecology ward (ID) at Kenyatta National Hospital were recruited for the study**.** The findings of the socio-demographic characteristics of the study population is summarized in table1. Most of the clients were in the age group 20-29 forming 62.2% (230) of the study population followed by the age group 30-39 forming 25.9%(96). Adolescent/Teenagers (10-19) formed 10.8%. Most of the clients were resident of Nairobi forming 88.6% (328) and the proportion from the low income estates was higher forming 67%(248). Majority of the patients were married - 57.8% (214. Most (92.4%) were Christians with protestants forming 61.6% of the study population. The level of education was low with majority having only reached primary school 61.6% (228). But at least 100% of the study population had received some form of education. Most the clients were unemployed ,forming 55% (204) of the study population.

Table 1. Socio – demographic characteristics of respondents

| CHARACTERISTICS | **N=370** | **%** |
|---|---|---|
| AGE (YEARS) | | |
| 10 – 19 | 40 | 10.8 |
| 20 – 29 | 230 | 62.2 |
| 30 – 39 | 96 | 25.9 |
| > 40 | 4 | 1.1 |
| RESIDENCE | | |
| Nairobi | 328 | 88.6 |
| Low income | 248 | 67 |
| Middle income | 64 | 17.3 |
| High income | 16 | 4.3 |
| MARITAL STATUS | | |
| Single | 122 | 33 |
| Married | 214 | 57.8 |
| Separated | 28 | 7.6 |
| Widowed | 6 | 1.6 |
| RELIGION | | |
| Catholic | 114 | 30.8 |
| Protestant | 228 | 61.6 |
| Muslim | 12 | 3.2 |
| Others | 16 | 4.3 |
| EDUCATION | | |
| Primary | 228 | 61.6 |
| Secondary | 118 | 31.9 |
| University/College after secondary. | 24 | 6.5 |
| OCCUPATION | | |
| Unemployed | 204 | 55 |
| Domestic servant | 34 | 9 |
| Business Lady | 62 | 17 |
| Professional | 38 | 10 |
| Others | 32 | 9 |

**Postabortion family planning counseling services**

For the Postabortion family planning counseling services after index pregnancy, only 15.1%(56/370) were counseled, however more patients chose family planning 27% (100). Family planning and counseling services concerning the index pregnancy is summarized in table 2.

Table 2. Family Planning Counseling Services

| CHARACTERISTICS | **N ( %)** |
|---|---|
| COUNSELING ABOUT FP AFTER CURRENT ABORTION | |
| ❖ Counseled | 56/370 (15.1) |
| ❖ Not counseled | 314/370(84.9) |
| CHOOSING USE OF FP AFTER CURRENT ABORTION | |
| ❖ Chose FP | 100/370 (27) |
| ❖ Did not choose FP | 270/370(73) |
| REASONS FOR NOT CHOOSING FP; | |
| ❖ Not ready | 132/270 (49) |
| ❖ Afraid | 18/270 (6.7) |
| ❖ Lack of knowledge | 99/270 (37) |
| ❖ Advised against | 9/270 (3.3) |
| ❖ Others | 12/270 (4.4) |
| FP CHOSEN AFTER CURRENT ABORTION | |
| ❖ Pill | 30/100 (30) |
| ❖ IUCD | 2/100 (2) |
| ❖ Norplant | 10/100 (10) |
| ❖ Calendar | 2/100 (2) |
| ❖ Injection / Depo provera | 40/100 (40) |
| ❖ Abstinence | 6/100 (6) |
| ❖ Bilateral Tubal ligation | 10/100 (10) |
| REFERAL FOR FAMILY PLANNING | |
| ❖ Referred | 48/370 (13) |
| ❖ Not referred | 322/370 (87) |
| WHERE REFERRED | |
| ❖ KNH Family welfare clinic 66 | 24/48 (50) |
| ❖ Private clinic / Hospital. | 16/48 (33.3) |
| ❖ Others | 8/48 (16.7) |

**Quality of postabortion emergency treatment**

This was determined by; i) Time taken for patients to receive emergency postabortion evacuation and other treatments like drugs or intravenous fluids or blood transfusions for postabortion complications, ii) Appropriate management in comparison to the gestation of the abortions iii) The information given to the patients on their diagnosis. 63%(236) of clients were treated within 5hours of arrival to the hospital,16.2% within 6-12 hours 10.8% within 13 to 24 hours and only 9.1% after 24 hours. Other treatment included blood transfusion &intravenous fluids for shock, drugs for septic abortions and operations for complications of abortion like perforated uterus and pelvic abscess. Most of the abortions that were 12weeks and less, received Manual Vacuum Aspiration (MVA) treatment. Only 31.9%(118) were informed of their diagnosis while only 27%(100) were aware of the correct diagnosis as the one in the file.
These are summarized in table 3.

Table 3. Quality of postabortion emergency treatment

| **i) Time taken** | N=370 | **%** |
|---|---|---|
| 0 –5 hours | 236 | 63.8 |
| 6 –12 hours | 60 | 16.2 |
| 13 – 24 hours | 40 | 10.8 |
| > 24 hours | 34 | 9.1 |
| **ii) Diagnosis** | N=370 | **%** |
| a) Awareness of diagnosis | | |
| Informed | 118 | 31.9 |
| Not informed | 252 | 68.1 |
| b) Diagnosis comparison | | |
| Diagnosis awareness same as in file. | 100 | 27 |
| Diagnosis awareness not same as in file | 270 | 73 |
| iii) **Treatment and Gestation** | | |

| Gestation | Treatment Received | | | | | | |
|---|---|---|---|---|---|---|---|
| | MVA alone | | MVA & other treatments | | Other treatments only | | Total |
| | No. | % | No. | % | No. | % | |
| Less than 7 weeks | 3 | 23 | 10 | 77 | 0 | 0 | 13 |
| 7-12 weeks | 25 | 18 | 106 | 75 | 10 | 7 | 141 |
| 13-18 weeks | 34 | 30 | 68 | 60 | 11 | 10 | 113 |
| More than18 weeks | 15 | 15 | 75 | 73 | 13 | 12 | 103 |

**Postabortion referrals to other reproductive health services**

Only 14%(52) of the clients were referred to other reproductive health services while 86%(318) were not. Of those referred ,23.1% were referred to GOPC in KNH,11.5% to FWC in KNH,38.5% to Adolescent clinic in KNH and 26.9% to other health services outside KNH.88.5% of the referrals were verbal while 11.5% were through consultation request forms.

## DISCUSSION

There is high maternal mortality and morbidity attributed to abortion and postabortion complications in many developing countries like Kenya (30% of the 600 maternal deaths per 100,000 live births annually), thus comprehensive postabortion care services should include both medical and preventive care. Most of the patients were young with the age group of 20-29 years forming 62.2% of the study population. It is worth noting that teenagers formed 10.8% of the study population. Though the proportion of teenagers was lower than the findings of a previous investigator in the same setting 17.5%[15], special attention needs to be given to this group as regards to postabortion counseling for family planning and referral to the Adolescent reproductive health clinic for follow up.

Majority (88.6%) of the patients were residents of Nairobi with 67% having low socio-economic status thus residing low in class estates. This finding is not surprising as previous workers [17] have found unsafe abortion to be higher in women with low socio – economic status and most of them end up being admitted at Kenyatta National Hospital with postabortion complications. The Ministry of health in Kenya has a big challenge to come up with clear policies regarding the ever-sensitive issue of safe abortion, as unsafe abortion and its complications seems to be still a problem thus contributing to maternal mortality and morbidity.

Majority (57.8%) of the clients were married with single being 33%. These findings agree with reports of an investigation done in the same setting previously [15]. 100% of the patient had at least some education but majority (61.6%) had only attained primary education. This agrees with the previous findings[15]. The Christians were the majority (92.4%) with Muslims only forming 3.2%. Previous workers[15] had the same findings. This distribution conforms to the distribution of people by religious affiliation in Kenya where the majority are Christians. 55% of the patients were unemployed. This is a further confirmation that the majority of these patients are from a low socio – economic group. A finding cited by Aggarwal and Mati previously[10] The distribution of the index abortion with gestations was higher (38.1%) for 7-12 weeks, 30.5% for 13-18 weeks. Previous workers had the same findings[15.]

Postabortion counseling for family planning during the index abortion was very minimal (15 %) and only 27% chose family planning with 30% choosing pills, 2% for IUCD, 10% for Norplant, 2% for calendar method, 40% for injections, 6% for abstinence and 10% for bilateral tubal legation. Majority (72%) did not choose family planning and the reasons given varied and

follows: 48.9% were not ready, 6.7% were afraid, 36.7% had lack of knowledge and 3.3% were advised against. Majority (87.1%) were not referred for family planning services and for those referred, 50% were to Kenyatta National Hospital's (KNH) Family Welfare Clinic (FWC) 66 and 33.5% to private clinics/hospital.

The quality of emergency postabortion treatment was not good enough in terms of time taken for treatment to be offered as about 38% took more than 6hours to be offered emergency evacuation, although 63.8% were offered treatment within 5 hours of reaching the hospital. Current recommendation in Kenya is that emergency evacuation should be offered within 2hours of diagnosis [16]. Most of the abortions were managed well as per the gestation i.e. MVA done for over 75% for those case which were 12 weeks and less. Most (68.1%) were not informed of their diagnosis and only 27% knew the correct diagnosis as per the one written on the files. This shows that the quality of care is poor as the patients have a right to be informed of their diagnosis and should give informed consent before any procedure.

Postabortion referrals to other reproductive health services was poor with only 11.4% referred and of those referred, 23.1% were to Gynecologic out patient clinic (GOPC), 11.5% to FWC-66, 38.5% to adolescent clinic and 26.9% to services outside KNH. Format of referrals was mainly (88.5%) verbal with consultation request form constituting only 11.5%. From the findings of this study therefore, it is worth emphasizing that adolescent/teenagers forms a significant proportion of postabortion patients (10%) thus adolescent/reproductive health issues should be given more priority.

The gaps in postabortion care at Kenyatta National Hospital from this study includes lack of family planning conseling, poor quality of emergency treatment with long waits and lack of referrals to other reproductive health services. The family planning counseling needs to be given to all postabortion patients. Time taken should be reduced before emergency treatment by increasing staff and making the process more efficient from registration to provision of the services. Formal referrals to other reproductive health services must be initiated. Further research is needed on factors affecting quality of postabortion care including staffing, staff knowledge, attitude and practice.

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**References**


1. IPAS: Advances in Abortion Care Volume 4, Number 1 Carrboro, NC 1994.
2. Khama R.: Decentralizing PAC services: Insights from a Decade in Africa.
3. World Health Organization: Complication of Abortion Technical and Managerial Guidelines for Prevention and Treatment Geneva, WHO 1994a.
4. Lwanga, C.: Abortion in Mulago Hospital, Kampala E. Africa Med. J. 57: 138 1980.
5. Post abortion care, Population Report Series F: Number 7:105: July 1980.
6. Orero S. O: Postabortion Care: Paper Presented at the International Conference on Safe Motherhood on Effective Strategies to Promote Quality Maternal and Newborn Care – Nairobi May 22-26-2000.
7. Lema V. M. Kamau R. K. Rogo K. O. Epidemiology of Abortion in Kenya. The context for the study of adolescence ; Paper presented in Nairobi– 1989.
8. Omuga B. O. Presentation of abortions and its preventive problems at Kenyatta National Hospital. M. Med Thesis. University of Nairobi, 1989.
9. Kizza APM; Incomplete Abortion Treated with Karman's Cannula and Syringe. M. Med Thesis. University of Nairobi – 1989.
10. Aggarwal, V. P and Mati J. K. G. Epidemiology of Induced Abortion in Nairobi, Kenya. J. Obst. Gyn. East Cent Afr;1982; 1:54
11. Aggarwal, R. P. and Mati J. K. G. Review of Abortions at Kenyatta National Hospital. E. Africa, Med. J.1980; 57:138:
12. Narone, R. K. Ngulube J. J. and Naron J. N. A Study of Spontaneous Abortion in Zambia J. Obst. Gyn. East. Cent. Afr ;1983;2:150
13. Mtimavalye, L. A. R. Reproductive Health Care among Women in Africa. Current Trends and the Future J. Obstet. Gynaecol. East Cent. Afri. 1:48; 1982.
14. Omu A. E., Oronsayee. A.U: Fall M. K. B and Asupuo E. E. J. Adolescent Induced Abortion in Benin City, Nigeria. Int. J. Gynecology. Obstet;1981; 19:495
15. Mutungi A. Contraceptive Acceptance and Continuation in Women Managed for Incomplete Abortion in Kenyatta National Hospital. M.Med thesis, University of Nairobi, 1990
16. Standards for maternal care in Kenya, collaboration of professional societies of Kenya and the United Kingdom-Ministry of Health October 2002.