Original article

Outcome of Clandestine Abortions in Two University Teaching Hospitals in Yaoundé, Cameroon.

Pronostic des avortements clandestins dans deux hôpitaux universitaires de Yaoundé, Cameroun

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ABSTRACT

Purpose.
To evaluate the outcome of clandestine abortions.

Material and methods
This retrospective descriptive study was conducted between March 1st and August 31st, 2012 in the maternities of the University Teaching Hospital and the Central Hospital of Yaoundé, Cameroon. Files of women with clandestinely induced abortion were reviewed. Main variables studied were maternal age, gestational age, abortionist's qualification, method used and the complications reported.

Results
Ninety-four abortions were recorded. Mean gestational age was 11.0 ± 3.4 weeks. Methods used were mainly manual vacuum aspiration (39.4%), dilatation and curettage (29.8%) and misoprostol (13.8%). Abortionists were mostly health assistants (62.7%) and general practitioners (14.9%). Major abortion complications were severe anemia (24.5%), pelvic infection (18.1%), hypovolemic shock (17.1%) and incomplete abortion (16%). Maternal death occurred in 2.1%.

Conclusions
Clandestine abortions are still associated with maternal complications including maternal death.

Keywords : Clandestine abortions, Abortionists, Complications, Cameroon.

RÉSUMÉ

Objectifs
Evaluer le devenir des avortements clandestins.

Méthodes
Cette étude rétrospective et descriptive a été menée entre le 1er mars et le 31 aout 2012 dans les maternités du Centre Hospitalier et Universitaire et de l'Hôpital Central de Yaoundé, Cameroun. Les dossiers des femmes qui avaient pratiqué un avortement clandestin ont été revus. Les principales variables analysées étaient l'âge maternel, l'âge gestationnel, la qualification de l'avorteur, la méthode utilisée et les complications présentées.

Résultats
Quatre vingt quatorze avortements clandestins ont été recensés. L'âge gestationnel moyen était de 11,0 ± 3.4 semaines. Les méthodes utilisées étaient l'aspiration manuelle intra utérine (39,4%), la dilatation et curettage (29,8%) et l'utilisation de misoprostol seule (13,8%). L'avorteur était très souvent un auxiliaire médical (62,7%) ou un médecin généraliste (14,9%). Les principales complications étaient l'anémie sévère (24,5%), l'infection pelvienne (18,1%), le choc hypovolémique (17,1%) et l'avortement incomplet (16%). Le taux de décès maternel était de 2,1%.

Conclusion
Les avortements clandestins sont toujours associés aux nombreuses complications maternelles y compris le décès maternel.

Mots-clés : Avortement clandestin, Avorteur, Complications, Cameroun.

INTRODUCTION

The number of unwanted pregnancies is increasing worldwide [1]. Reasons for this include the increasing number of women of reproductive age [1], lack of sufficient knowledge on sexual education and reproduction, unavailability or incorrect use of modern contraceptive methods, contraceptive failure, ignorance or negligence especially in developing countries [2]. Only 14% of Cameroonian women of reproductive age were using modern contraceptive methods in 2011 [3]. Given that the incidence of unwanted pregnancies is increasing, the need to carry some of those pregnancies to term becomes uncertain. Some of these pregnancies will, therefore, be terminated.

The rate of unsafe abortions worldwide is still increasing [1], this rate was 49% in 2008 compared to 44% in 1995 [4]. Various methods of inducing abortion exist and include medical, surgical and even traditional methods [5,6]. Unsafe abortion is being practiced since antiquity. It continues to be practiced

today as a method of birth control. In countries like Cameroon where abortion is illegal, it is done clandestinely by health professionals, whose qualification in terminating pregnancy is unknown, and sometimes by non health professionals or by the women themselves and in settings where conditions for a safe abortion are not met. Henceforth, complications of abortions are awaited. The aim of this study was to evaluate the outcome of clandestine abortions among women received in two university teaching hospitals in Yaoundé, Cameroon so as to determine abortionists and the commonest complications found.

PATIENTS AND METHODS

This retrospective descriptive study was conducted between March 1st and August 31st, 2012 (six months) in the maternities of the University Teaching Hospital and the Central Hospital of Yaoundé, Cameroon. Files of women with clandestinely induced abortion received in the two institutions were reviewed. Variables studied included maternal age, parity, marital status and occupation, gestational age at which abortion was performed, the number of previous induced abortions, the qualification of the abortionist, the method used, the duration of antibiotic cover, the time interval between abortion and consultation in our service, the complications and the duration of hospital stay. Data were recorded on a pretested questionnaire. This study was approved by the institutional ethics committee. Data were analyzed using SPSS 18.0.

RESULTS

A total of 94 clandestine abortions were recorded during the study period Maternal ages ranged between 16 and 41 years (Table I), with a mean of 24.7 ± 4.8 years. Parities ranged between 0 and 6 (Table II), with a mean of 1.5 ± 1.5.

TABLE I: DISTRIBUTION OF MATERNAL AGE AT ABORTION

Maternal age (years)	Number	%
16-19	13	13.8
20-24	36	38.3
25-29	32	34.1
30-34	8	8.5
35-39	4	4.3
40-41	1	1

Regarding occupation, 48 out of these 94 women (51.0%) were students, 24 (25.5%) housewives, 3 (3.2%) were jobless and the 19 others (20.2%) had various jobs in informal sector, public or private sectors.

TABLE II: PARITY DISTRIBUTION AT THE MOMENT OF ABORTION

Maternal parity	Number	%
0	35	37.2
1	19	20.2
2	15	16
3	15	16
4	5	5.4
5	4	4.3
6	1	1
Total	94	100

Concerning marital status, 73 (77.6%) of women were single against 19 (20.2%) married. There was one widow and one divorced (1.1% each).

A total of 34 women (36.2%) had one or two previous clandestinely induced abortions with 10 (10.6%) having 2 previous clandestinely induced abortions. The socio-demographic characteristics of these 34 women showed mean age of 26.6 ± 4.1 years (19-39), mean parity 1.3 ± 0.4 (1-2), 23 out of 34 (67.6%) were single, 14 (41.1%) were students against 11 (32.3%) housewives.

The gestational ages at the moment of abortion ranged between 5 and 22 weeks (Table III), with a mean of 11.0 ± 3.4 weeks.

TABLE III: GESTATIONAL AGES AT ABORTION

Gestational age (weeks)	Number	%
5-7	11	11.7
8-9	23	24.5
10-11	23	24.5
12-13	17	18.1
≥14	20	21.2
Total	94	100

Abortions were done by health assistants in 59 cases (62.7%) and by general practitioner in 14 cases (14.9%). In 8 cases (8.5%), women conducted self-induction of abortion. In the remaining 13 cases, abortionists were either a friend (procedure done by ways of transcervical foreign body insertion, misoprostol or traditional methods: 9 cases), a traditional practitioner (3 cases), or an obstetrician and gynecologist (1 case).

The procedure was performed either in the provider's home or in the patient's home in 39 cases (41.5%), in

health centers in 33 cases (35.1%), and in private clinics in 20 cases (21.3%). The remaining two cases (2.1%) were done in a district hospital.

Methods used for terminating pregnancy were manual vacuum aspiration (MVA) in 37 cases (39.4%), dilatation and curettage in 28 cases (29.8%) and misoprostol (various routes used) in 13 cases (13.8%) (Table IV).

TABLE IV: DISTRIBUTION OF METHODS OF ABORTION

Method of abortion	Number	%
Manual Vacuum aspiration	37	39.4
Curettage	28	29.8
Misoprostol	13	13.9
Transcervical foreign body*	5	5.3
Traditional methods	4	4.3
Intramuscular injection**	2	2.1
Intramuscular injection** + misoprostol	2	2.1
Amniotomy	2	2.1
Potassium permanganate***	1	1.0
Total	**94**	**100**

* Various objects used. ** Drug used unknown.
***Inserted in the vagina

Seventy one patients (75.5%) received antibiotic cover after the abortion for a period of 1 to 14 days with a mean of 4.1 ± 3.5 days. Up to 23 cases (24.5%) were not put on antibiotic prophylaxis.

In our study, the time period that elapsed between abortion and consultation in our service varied between 0 and 90 days with a median of seven days.

The main complications observed among these patients were severe anemia necessitating blood transfusion, pelvic infection and hypovolemic shock (systolic blood pressure < 80 mm Hg) (Table V). Maternal death occurred in 2 cases (2.1%) due in one case to generalized body swelling (autopsy not done) that followed an intramuscular injection of an unknown medication at 8 weeks gestation and in the other case to septic shock with generalized peritonitis that developed after dilatation and curettage at 14 weeks with late consultation in our service (three months after abortion).

Hospital stay varied between 0 and 21 days with a mean of 3.4 ± 3.4 days. The longest hospital stay was observed in the patient who died of septic shock. In fact after abortion the patient developed left tubo-ovarian abscess that ruptured and resulted in a generalized peritonitis that was drained, but which was complicated subsequently by evisceration; she was then re-operated but three days later she developed septic shock and died.

TABLE V: COMPLICATIONS OF CLANDESTINE ABORTIONS

Complications	Number	%
Severe anemia	23	24.5
Pelvic infection	17	18.1
Hypovolemic shock	16	17.1
Incomplete abortion	15	16.0
Uterine perforation	6	6.4
Severe anemia + Pelvic infection	5	5.3
Generalized peritonitis	2	2.1
Septic shock	2	2.1
Maternal death	2	2.1
Septic shock + Acute renal failure	1	1.0
Septic incomplete abortion	1	1.0
None	4	4.3
Total	94	100

DISCUSSION

The mean maternal age was 24.7 years in our study and the mean parity 1.5. 77.6% of our patients were single. This shows that clandestine abortions as revealed by our study were mostly carried out by young single women with few or no children. This finding is in contrast to that of Shah et al in Pakistan who observed that 65.5% of their patients were married and the complete family size was the reason of inducing abortion [7].

In our study, previous clandestine abortions were reported by 34 women (36.2%). This can be explained by the fact that some women use abortion as a contraceptive method especially in some developing countries like Cameroon where contraceptive methods are not always available. Our findings are higher than the rate of 18% found by Uria et al in Spain [8].

Concerning occupation, the majority of our patients were students (51%) followed by housewives (25.5%).

Although the mean gestational age was 11.0 weeks, some of our cases were done as late as 22 weeks gestation which increase certainly the risk of complications especially hemorrhage.

Clandestine abortions were mainly done by health assistants (62.7%). This might be due to the fact that since this is a hospital-based study, only (assumed) complicated cases come to consult. Uncomplicated cases that might have been done by skilled abortionists like gynecologists do not consult. This is higher than the rate of 35.3% found by Tadesse et al

in Ethiopia [9]. In our study, abortion was done by untrained health providers in 79 cases (84%). Our rate is close to that of 84.6% of untrained abortionists observed by Shah et al in Pakistan [7]. We noted that 15 cases (16%) were carried out either by general practitioners or by a consultant in obstetrics and gynecology who received training in uterine evacuation procedures.

In our series, 39 41.5%) abortion was carried out mainly in the abortionist's or patient's home (and in health centers (33 cases or 35.1%). This is due to the fact that since abortion is illegal in Cameroon, it is conducted in a place where the abortionist and the women are the only persons who are aware of the procedure. This rate is less than that noticed by Tadesse et al who found that 60% of abortions were carried out at the abortionist's home and 35% at the patient's home in Ethiopia [9]. Our result is contrary to that observed in a developed country like Spain where Uria and Mosquera noticed that 98% of abortions were done in private clinics [8].

The method of choice for pregnancy termination in our series was MVA (39.4%) contrasting sharply with the findings of Asa et al in Papua New Guinea where induction with misoprostol was the commonly used method [10].

The main complication observed among our patients was hemorrhage resulting sometimes in hypovolemic shock or severe anemia (39 cases or 41.5%). This might be due to the fact that some cases were done at very advanced gestational age (≥14 weeks). Srinil in Thailand observed among 170 women with unsafe abortion 16% of complications. There were 18 cases of hemorrhage that required blood transfusion, 6 cases of acute renal failure, 2 cases of sepsis and 2 cases of maternal death [11]. Intrauterine injection of chemicals was the most common abortion induction method in Srinil's series with hemorrhage being the main complication.

In our study, antibiotic cover was not used in 24.9%. Furthermore, there was usually delayed consultation after abortion (mean: 12.5 days). These findings might explain the high rate of infection and anemia observed in this study.

Two maternal deaths (2.1%) occurred in our series as in that of Srinil in Thailand [11].

CONCLUSION

Unsafe clandestine abortions are being practiced in Cameroon despite law restrictions. As shown in this study, some of them are associated with immediate and short term complications including maternal death. In countries like Cameroon where abortion is illegal, efforts should emphasize on continuous education about sexual behaviors and reproduction, and sustained availability and effective use of modern contraceptive methods in order to reduce the rate of unwanted pregnancies, and consequently of clandestine abortions since only 14% of Cameroonian women of reproductive age used modern contraceptive methods in 2011 [3].

CONFLITS OF INTERET

The authors have none to declare.

AUTHORS' CONTRIBUTION

NE conceived the protocol, reviewed files and wrote the manuscript. BE helped in rewiewing patients files FJN contributed in the writting of the manuscript.

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