

Factors associated with induced abortion among patients admitted in post-abortion care services in the tertiary level health facilities of N'Djamena-CHAD: cross sectional study.

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Background:

An overview of worldwide abortion incidence shows an average of 56 million abortions occurred each year during 2010-2014, this is equivalent estimate of 35 per 1,000 women of reproductive age [1]. According to the same source, globally eight (8) million abortions were procured in dangerous conditions and most of them were located in developing countries. In addition, in a year, it is recorded about 210 million worldwide pregnancies in which, near the half 47% are declared unplanned by women. It has been observed also that more than half (56 million) on these unwanted pregnancies end in abortion. Even if abortion is a common global burden that affect all countries without distinction, it is unequally distributed. The higher rate observed is 59 per 1000 women in the Caribbean, followed by 48 in Latin America, 42 in Eastern Europe, 36 in Asia, 34 in Africa and 17 in 1000 women in Northern America. Furthermore, in Africa, the annual abortion rate varies slightly from one sub-region to another. It is 31 per 1,000 women of reproductive age in West Africa to 38 per 1,000 in North Africa and in East. Central and South Africa rates are closer to the continental average of 34 per 1,000 [2]. Similarly, in the same sub-region, the incidence of abortion is varied from one country to another. In West Africa for example, abortion rate was estimated about 33 per 1,000 women age of reproductive age in Nigeria 2012 [3] and 17 in Senegal at the same year [4]. According to the recent sources, in the East part of the continent, that rate was 39 per 1,000 in Uganda in 2013, [5] and 48 per 1000 in Kenya in 2012 [6]. In 2016 an estimated 146,713 abortions were performed, yielding an abortion rate of 56 per 1,000 women aged 15–49 in Democratic Republic of Congo [7]. In Chad, according to the health facilities sources, in 2013 abortion was the third leading cause of health problems among people aged over 15 year after malaria and trauma. This practice is only permitted if the woman's health is at risk or in case of serious fetal malformations [8]. The study aims to to investigate the associated factors and morbidity related to induce abortion among women of reproductive age admitted in the four selected health facility care.

Methodology

Study design: A descriptive study based on health facilities survey, using mixed methods (quantitative and qualitative approaches). The study design and protocols are adapted from previous studies in others countries.

Setting: The study is conducted in N'Djamena city in Chad Republic from 01 January to 30 June 2019.

Data collecting and source: The primary data for this study come from the survey conducted by the author: a Health Facilities Survey (HFS) to measure the number of abortion complications treated in health facilities, and analyse their associated factors

Study population and Sampling:

Health Facilities Survey: The sampling frame consisted of the Ministry of Health's most recent list of all health facilities (public and private) considered likely to provide post-abortion care (PAC). A separate list of all public and private facilities was obtained from that Ministry. Facilities that did provide only primary care, that were specialized

in non-reproductive health services, or that otherwise lacked the capacity to provide PAC, were excluded from the sampling frame. This study concerns exclusively women of reproductive age 15-49. Structured questionnaires are used to collect data from 384 patients recruited among women admitted with post-abortion complications in the four selected health facilities during the period of the study.

Definition of variables

The dependent variable is a binary variable: Ever had induced abortion in her lifetime: Yes/No
The independent variables are:

- Variables related to women’s sociodemographic characteristics
- Variables related to women’s sociocultural and economic characteristics
- Variables related to women’s reproductive history and contraceptive use
- Variables related to the household and partner.

Ethical Consideration

The ethical permission is obtained from the Ethical comity in the College of Medicine of the University of Ibadan and the second one is asked from the Ethic Committee of Higher Ministry of Training in Chad. The nature and purpose of the study were explained to each participant before getting her/his contentment. Confidentiality and anonymity also were respected.

Data analysis :

the survey recorded the total number of complications from all abortions admitted in the four selected health facilities care (both induced and spontaneous cases), then we t subtracted those due to spontaneous abortion from the all to obtain finally the frequency of induced abortion complications. The number of spontaneous abortion complications treated in facilities was calculated using indirect estimation techniques. To ensure the type of abortion, we used the assumption that only second trimester spontaneous abortions require care, then we obtained the classification of the abortion by category. We used Chi square for the descriptive statistics. Multiple binary logistic regression analysis to determine the effect of associated factors with induced abortion and to determine also the eventual confounding factors. Crude and adjusted odds ratios (OR) are calculated for each covariate with 95% confidence intervals. The level of statistical significance will be set at P < 0.05.

Results and discussion

The descriptive analysis of the sociodemographic characteristics of patients shows that almost half of the women admitted with post-abortion complications in N’Djamena's hospitals are adolescents aged between 13 and 24, and more than one third have not been educated. While nearly 3/4 of these women are married, 52% are housewives and 29% are still on school benches. Also the types of abortion recorded in the different health centers, show that 29% of the admitted cases are confirmed abortion and 8.33% are confirmed spontaneous abortions.

Sociodemographic characteristics of participants

Table N°1 : Sociodemographic characteristics of participants		
Variables	Frequency (n=384)	Percent (%)
1. Age		
13-18	42	10.9
19-24	145	37.8
25-30	131	34.1
31-36	38	9.9
37 and +	28	7.3

2. Region		
Muslim	243	63.3
Christian	140	36.5
Animist	1	0.3
3. Type of place of residence		
Urban	367	95.6
Peri-urban	17	4.4
4. Educational level		
No education	146	38.0
Primary	82	21.4
Secondary	124	32.3
Higher	32	8.3
5. Matrimonial status		
Single	92	23.7
Married	276	72.0
Divorced	11	3.0
Widows	1	0.3
Missing	4	1
6. Respondent's occupation (grouped)		
Student	112	29.2
Agricultural - self employed	1	0.3
Sales	35	9.1
Services	12	3.1
Household and domestic	201	52.3
Jobless	10	2.6
Other	11	2.9
Missing	2	0.5

Source: Data collected form HFC, 2019

Table N° 02: Abortion classification		
Abortion classification	Frequency (n=384)	Percent (%)
Induced (confirmed)	112	29.17
Induced (probable)	27	7.03
Spontaneous (certain)	186	48.44
Spontaneous (confirmed)	32	8.33
Unclassified	27	7.03

Source: Data collected form HFC, 2019

Table N° 03 : Abortion cases classified in hospital at four centers						
Health Facilities Care	Induced (confirmed)	Spontaneous (certain)	Spontaneous (confirmed)	Induced (probable)	Unclassified	Total
CNTF	35	71	22	10	1	109
HATC	4	50	1	3	12	70
HDS	29	14	2	0	7	52

HME	74	51	7	14	7	153
Total	112	186	32	27	27	-

Source: Data collected form HFC, 2019

Discussion

In Chad as in the other countries, not all induced abortions that result in treated complications, some of them are done without complications, while others end in complications that need seeking post abortion care in health facilities. This explains the low rate of abortion in hospitals. In 2017 there were 1,578 new cases of induced abortions recorded in the country [9]. N'Djamena is the city where women are more likely to perform abortion (667 new cases out of 100,000 expected pregnancies), followed by of Moyen Chari (487), Mandoul (388) and Logone Oriental (294). Moreover, these sources have pointed out that the incidence of induced abortions reported does not reflect the reality at all. As abortion is illegal, none services of safe abortion are provided in the country. As a result, women induce abortions in the neighborhoods themselves or with the help of people with little or no competence. It is only in case of complications that post-abortion care is requested to save the life of the woman. It has therefore been strongly recommended to conduct a deep reflection on this issue through operational research.

References

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