

Knowledge, Attitudes and Practices of Infertile Women on Child Adoption in Douala (Cameroon)

Charlotte Tchente Nguefack^{1,2*}, Clovis Ourtching¹, Halle Ekane Gregory^{1,3},
Eugène Belley Priso^{1,4}

¹Obstetrics and Gynecology Unit, Douala General Hospital, Douala, Cameroon

²Department of Obstetrics and Gynecology, Faculty of Medicine and Pharmaceutics Science, University of Douala, Douala, Cameroon

³Department of Obstetrics and Gynecology, Faculty of Health Sciences, University of Buea, Buea, Cameroon

⁴Department of Obstetrics and Gynecology, Faculty of Medicine and Biomedical Science, University of Yaoundé, Yaoundé, Cameroon

Email: [*cnguefack2007@yahoo.fr](mailto:cnguefack2007@yahoo.fr)

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Abstract

Background: The aim of the study was to evaluate the knowledge, attitude and practices on child adoption among infertile women in Douala (Cameroon). **Methods:** It was a prospective descriptive study of six months duration at the General Hospital and the Dawn Medical Foundation Clinic. Patients of the gynecologic unit presenting with infertility were included. A questioner was administered to each patient with the following variables: Age, marital status, profession, level of education, past gynecologic history, number of children, type and the duration of infertility. Their knowledge, attitude and practice toward child adoption were investigated. Data collected was analyzed using the statistical software EPI-INFO 6.04 and R. p value < 0.05 was considered to be statistically significant. **Results:** Among the 300 women included, 269 (89.7%) had already heard about adoption, 62.1% through the media. Seventeen percent knew who to meet in order to adopt a child in Cameroon. Two hundred and thirty patients (76.7%) were in favor of adoption but 48.7% of them didn't want to adopt a child. One percent of patient had adopted a child. The attitude towards adoption was significantly influenced by the duration of infertility of more than 10 years ($p = 0.0014$). Among women who have at least one child 9.4% wanted adoption against 21.4% who did not want adoption ($p = 0.0305$). Among women aged between 25 and 30 years, 28.2% wanted to adopt a child against 79.1% who did not want it ($p = 0.000$). Eighty five percent of women who had secondary infertility did not want to adopt against 44.7% who wanted it ($p = 0.0003$). **Conclusion:**

*Corresponding author.

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The level of knowledge is high in educated patient. However, many women don't know the right procedure and the structures in charge of adoption. Their attitude is favorable but the practice of adoption remains low.

Keywords

Knowledge, Attitudes, Practices, Child's Adoption, Douala

1. Introduction

Infertility is the inability of a couple to have a child after one year of regular sexual intercourse. Its prevalence is 15% to 20% worldwide [1]-[3]. For half of the women and 15% of the men interviewed, infertility is one of the most disturbing challenges in life [4]. Actually, in our societies, the absence of a desired pregnancy rapidly becomes the source of intense frustration and early consultation to a physician. One in 7 couples will consult a physician at least once for suspicion of infertility whereas one couple in 10 will consult for treatment of infertility [5]. The needs of couples and the therapeutic options have been increasing with time. Solutions range from medical treatment to techniques of assisted reproductive technology. A study done in France showed that in 100 couples requesting assisted reproductive technology (ART), 20 have a child with the first attempt of In vitro Fertilization (IVF), 40 during the fourth IVF. For the 40 couples who are not able to have children through ART, 20 will never have children, 20 will eventually have children, 10 naturally and 10 by adoption [6].

Adoption is a legal act where a child becomes affiliated to a parent to whom he/she is not biologically related. This practice is well known and done in certain high income countries practice, whereas only 1.2% of couples had already adopted a child, 27.2% had the desire to adopt a child [7]. The acceptance of adoption does not depend only on the level of education but also on the socio-economic level [8] [9]. In addition, social beliefs constitute a non-negligible influence on attitude towards adoption [10] [11]. In our milieu, where the socio-economic level does not permit many couples to have access to ART, how then does the patient regard child adoption?

2. Methods

We did a cross sectional study from 1st June to 30th November 2012. Outpatients and inpatients with infertility consulting at the gynecological unit of Douala General Hospital and Down Medical Foundation clinic were recruited: Douala general hospital is a tertiary level hospital (the reference hospital in our system). The Down Medical Foundation clinic is a secondary level structure. The number of consultation in 2012 at the clinic and the hospital were respectively 2880 and 59,199 with 6439 in the obstetrics and Gynecology Unit. Infertility has been defined as the absence of pregnancy after regular sexual intercourse (3 days/week averagely) for 1 year. We obtained ethics clearance from hospitals. Patients with infertility who did not give their consent to participate in the study were excluded. After some explanation on the aim of the study and the obtention of their informed consent, we filled a pretested questionnaire. Patients were enrolled consecutively. Variables studied included age, marital status, profession, level of education, ethnicity and religion. The past gynecological and obstetrical history of participants, the type and duration of infertility were documented. Their level of knowledge and their attitude towards adoption was evaluated, and the practice of child adoption was investigated. The sample size was calculated using Lorentz formula

$$n = \frac{t^2 \times p(1-p)}{e^2}$$

n = sample size

t = level of confidence deduced from the confidence rate (traditionally 1.96 for a 95% confidence interval)—measure of central tendency

p = prevalence, $p = 20\%$ (prevalence of infertility) [1]

e = margin of error (traditionally fixed at 5%)

this lead to a sample size of 245 participants.

The data collected was analyzed with the statistical software EPI-INFO 6.04 and R. The chi-square test was used for comparisons of values with a p value less than 0.05 considered statistically significant.

3. Results

3.1. Study Population

A total of 300 infertile patients were recruited in this study. 326 patients were invited and 300 gave informed consent. The response rate was 92.02%. The most represented age range was between 25 and 30 years (64.7%). The majority of patients were Christians (95.7%). Most of the patients were at least educated up to the level of secondary school (92.3%). Primary infertility was found in 26.33% whereas secondary infertility was found in 73.7% (Table 1).

3.2. Knowledge

Two hundred and sixty nine patients (89.7%) had already heard about adoption and among them 62.1% were informed via the media. Only 17.1% knew who to meet in order to adopt a child in Cameroon (Table 2). Edu-

Table 1. Socio-demographics characteristics of patients.

Variables	Total n = 300 (%)	
Age (years)		
≤20	1	0.3
20 - 25	24	8
25 - 30	194	64.7
30 - 35	44	14.7
35 - 40	30	10
>40 years	7	2.3
Marital status		
Married	170	56.7
Single	130	43.3
Profession		
Private worker	125	41.7
Civil servant	77	25.7
Housewife	62	20.7
Student	36	12
Religion		
Christian	287	95.7
Muslim	13	4.3
Educational level		
Primary	20	6.7
Secondary	120	40.0
University	157	52.3
Never been to school	3	1.0
Infertility type		
Primary infertility ^a	79	26.3
Secondary infertility ^b	221	73.7

a) Primary infertility^a: When a woman is unable to ever bear a child, either due to the inability to become pregnant or the inability to carry a pregnancy to a live birth; b) Secondary infertility^b: When a woman is unable to bear a child, either due to the inability to become pregnant or the inability to carry a pregnancy to a live birth following either a previous pregnancy or a previous ability to carry a pregnancy to a live birth.

Table 2. Knowledge on child adoption.

Variables	Yes n = 269 (%)		No n = 31 (%)		Total n = 300 (%)	
Adoption						
Know that we can adopt	228	84.8	/		228	76.0
Don't know	41	15.2	31	100	72	24.0
Source of information						
Media	167	62.1	/		167	55.7
Hospital	16	5.9	/		16	5.3
Parent	26	9.7	/		26	8.7
Friend	60	22.3	/		20	6.7
Procedure						
Known	163	60.6	/		163	54.3
Unknown	106	39.4	31	100	137	45.7
Structures in charge						
Know the structures	46	17.1	/		46	15.3
Don't know	223	82.9	31	100	254	84.7

cated patients had heard more about adoption (55.8%), they knew more about adoption of children in Cameroon (48.3%), that a procedure existed (33.5%) and the structure concerned (9.3%) (**Table 3**).

3.3. Attitudes

Two hundred and thirty patients (76.7%) were in favor of adoption but 48.7%, despite being in favor did not want to adopt a child (**Table 4**). The attitude towards adoption was significantly influenced by the duration of infertility: 44.7% of women who had infertility for more than 10 years wanted to adopt a child versus 14.4% who did not want to adopt ($p = 0.0014$). Among women who have at least one child 9.4% wanted adoption against 21.4% who did not want adoption ($p = 0.0305$). Among women aged between 25 and 30 years, 28.2% wanted to adopt a child against 79.1% who did not want it ($p = 0.000$). 85.1% of women who had secondary infertility did not want to adopt against 44.7% who wanted it ($p = 0.0003$) (**Table 5**).

3.4. Practice

One percent of patients had already adopted a child. Their motivation was the long duration of infertility (66.7%) and the ardent desire to have a child (33.3%) (**Table 6**).

4. Discussion

Among the 300 patients recruited, 89.7% had heard about adoption, mainly through media. Although 76.7% were in favor of adoption, only 1% had already adopted a child.

Nwobodo *et al.* [7] found that 74.8% of participants had knowledge on the subject of adoption whereas Ezugwu *et al.* [9] found 86.4%, with 27.3% who knew exactly the meaning of adoption. This is concordant with our findings (89.7%). Adewunmi *et al.* found that 47.8% of participants who had information on the subject obtained it from friends, which is contrary to our findings, where the majority 62.1% obtained information from the media. Avidime *et al.* also found that the media constituted the main source of information in 35%. We think that our study follows the “phenomenon of stolen baby at the Gynaecologic Obstetric and Pediatric Hospital of Yaounde” which was the subject of much talking on our radio and television channels with frequent mentioning of the topic of child adoption [12].

Table 3. Knowledge according to educational level.

Variables	Total n %		Analphabet n %		Primary level n %		Secondary level n %		Superior n %	
Never heard about adoption	31	10.3	3	9.7	8	25.8	13	41.9	7	22.6
Have heard about adoption	269	89.7	0	0.0	12	4.5	107	39.8	150	55.8
Adoption is possible in Cameroon	228	84.8	0	0.0	7	2.6	91	33.8	130	48.3
Procedures well known	162	60.2	0	0.0	5	1.8	67	24.9	91	33.8
Structures in charge well known	46	17.1	0	0.0	4	1.4	17	6.3	25	9.3

Table 4. Attitudes towards child adoption.

Variables	Favorable n = 230 (%)		Non favorable n = 70 (%)		p
Would like to adopt because					
AMP is cost effective	21	9.1	0	0.0	0.9999
Low success of AMP	24	10.4	0	0.0	0.1505
It is easy	39	17.1	1	1.4	0.0650
Total	84	36.5	1	1.4	
Don't want to adopt because of					
Stigmatisation	45	19.6	29	41.4	0.1211
Complexity of the procedure	16	7.1	12	17.1	0.5214
Child may not have consideration to his parent	46	20.1	17	7.4	0.5822
cultural reasons	39	17.1	11	15.7	0.9999
Total	146	48.7	69	98.57	

Table 5. Attitudes towards adoption according to the duration of infertility, number of children alive, maternal age and type of infertility.

Characteristics	Would like to adopt n = 85 (%)		Don't want to adopt n = 215 (%)		p
Duration of infertility					
1 year	2	2.4	21	9.8	0.2126
2 - 5 years	28	32.9	78	36.3	0.9822
6 - 10 years	17	20.1	85	39.5	0.0964
>10 years	38	44.7	31	14.4	0.0014
Number of children					
No children	77	90.6	169	78.6	0.3559
>one child	8	9.4	46	21.4	0.0305
Age					
18 - 24 years	14	16.5	10	0.5	0.0024
25 - 30 years	24	28.2	170	79.1	0.0000
31 - 39 years	41	48.2	33	15.3	0.0013
≥40 years	6	7.1	2	0.9	0.2083
Type of infertility					
Primary	47	55.3	32	14.9	0.0000
Secondary	38	44.7	183	85.1	0.0003

Table 6. Practices on child adoption.

Characteristics	Has adopt n = 3 (%)	Never adopt n = 297 (%)
Reasons for adoption		
Ardent need of a child	1 33.3	/
Infertility of long duration	2 66.7	/
Simplicity of the procedure	0 0.0	/
Reasons for non adoption		
No information	/	45 15.2
Complexity of the procedure	/	73 24.6
Cultural reasons	/	127 42.8
Hope of natural conception	/	52 17.5

We found in our study that the level of education influences the knowledge on the adoption. The most educated people were those who knew that it was possible to adopt a child in Cameroon and knew structures to go to.

The attitude of participants towards adoption was good as 76.7% was favorable. Avidime *et al.* [13] found that 77% had good attitudes towards adoption and that there was an association between the number of living children and the desire to adopt a child. Adewunmi *et al.* [8] found that 42.6% of the patients wanted the option of adoption only if there was no solution to the infertility. Olandokun *et al.* in a similar study done in Nigeria [10] found that 64% thought that adoption is culturally unacceptable. Whereas in the study done by Nwobodo *et al.* [7], 71.6% of participants with infertility did not want to adopt because adoption of children did not permit them to fulfill their role of conception as women. The 23% of participants with infertility in our study who did not want adoption gave as reason stigmatization from their family and the factors related to tradition. Ezugwu *et al.* [9] found that 69.3% of patients did not want adoption for fear of abnormal behavior from the adopted child, the past history of his parents, and mainly because according to them adoption was not a solution to the problem of infertility. It stands out in many studies [7] [8] [14] like ours that duration of infertility of more than five years, advanced maternal age, absence of children strongly influence the decision in adopting a child.

The adoption rate remains low according to most researchers, ranging from 1.2% - 7.0% [4] [9] [14]. It is 1.2% according to Nwobodo *et al.* [4], 4.5% according to Ezugwu *et al.* [9] and 7% according to Ali and Sami [14]. The main decision maker in the study by Ali and Sami was the husband in 17% of the cases and the mother-in-law in 68% of the cases. Oladokun *et al.* [8] in another older study in Nigeria found that obstacles to child adoption were the culture, the fear of stigmatization, financial problems and the complexity of the procedure. These findings were similar to ours with an adoption rate of 1.0%. Among those who adopted a child, 66.7% did it because of long duration of infertility (more than 6 years). The reasons given by those who did not want adoption where cultural 42.8%, complexity of the procedure 24.6% and the hope of conceiving by young women 17.5%.

Limitations of the study concern the sample size and duration of the study which are not large. Furthermore, family incomes are not mentioned and there is no involvement of spouses.

5. Conclusion

The study of knowledge, attitudes and practices of infertile women towards child adoption presents several disparities. The level of knowledge remains high 89.7% especially in participants having a good level of education, the media being the best source of information at the moment of the study. However, a considerable number of women do not know the procedure or the structures responsible for adoption. The overall attitude remains favorable but only 1.0% of infertile women have already adopted a child. The reasons given by those who have not adopted children are mostly influenced by cultural beliefs. Considering the lack of awareness of adoption and the procedures involve, physicians and administrators should carry out IEC programs and simplify procedures to make this option available abate the sufferings of distressed couples who cannot have access to ART.

6. Conflicts of Interest

None. The authors do not declare any conflict of interest.

7. Contribution of Authors

All authors contributed in the project conception, data collection and analysis, drafting and proof reading the manuscript.

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