Profile of Post-partum Intrauterine Device Users in African Environment: Experience of Sylvanus Olympio Teaching Hospital of Lome (TOGO)

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Abstract Introduction: Family planning in the postpartum are an ideal platform for repositioning contraception; They are aimed at women who wish to space births or prevent pregnancies and the post-partum intrauterine device (PPIUD) is one of the method of choice. Objective: To evaluate the use of the PPIUD in the Gynecology and Obstetrics clinic of the CHU-SO of Lome. Patients and methods: The use of the PPID in the Gynecology and Obstetrics clinic of the CHU-SO is effective since October 2015. Our work is a descriptive, retrospective and prospective study, from October 1, 2015 to September 30, 2017. Results: From October 2015 to September 2017, 211 out of 18170 eligible deliveries had adopted the IUD in the postpartum period (1.49 %). The average age was 31 years old with extremes of 16 and 49 years old. Conclusion: The intra-uterine device (IUD) is a modern contraceptive method that has proven to be very beneficial in the postpartum. Therefore, the promotion of this method must be maintained to reduce unmet need for contraception and promote the health of couples and families.

Keywords: post partum family planning, post partum intra uterine device, CHU-SO, Lomé-Togo (Africa)


1. Introduction

The postpartum is the period during which the maternal organism, modified by the pregnancy, undergoes changes destined to return it to the former state [1]. Family planning (FP) is a key intervention in reducing maternal, neonatal and infant mortality and morbidity by preventing unwanted pregnancies and births that are too close together [2]. Post partum Family Planning (PPFP) address to women who want to have more children (spacing of pregnancies) and those who now have the desired number of children and want to avoid future pregnancies (prevention of pregnancies) [3]. Post partum family planning (PPFP) services are a platform ideal for

2. Patients and Framework of Study


Included were records of all eligible deliveries who chose to receive the postpartum IUD ( intra uterine device) in the CHU-SO gynecology and obstetrics department during the study period. Data collection was done through a literature review from the postpartum IUD registry and patient records. The data processing was done by the Excel software and Epi. Info version 7. Before insertion of the IUD, the provider was careful to ensure that the client received quality family planning counseling and that she made an informed and voluntary decision that is notified in the PPIUD registry and in the client's file. This work is purely scientific and concerns the maternal health sector, which is experiencing maternal-fetal morbidity and mortality, which remain a global scourge. No woman will be named in this work, guaranteeing medical confidentiality. The results obtained here and the resulting recommendations will be available to all stakeholders in the fight against maternal-fetal morbidity and mortality.
3. Results

3.1. PPIUD Status during Our Study

3.1.1. Evolution of the Number of Deliveries Eligible for PPIUD

In our study, 78% of deliveries were eligible for PPIUD. Two hundred and eleven (211) women gave birth to PPIUD on 14,175 eligible births.

<table>
<thead>
<tr>
<th></th>
<th>2015-2016</th>
<th>2016-2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of delivery</td>
<td>9151</td>
<td>9019</td>
<td>18170</td>
</tr>
<tr>
<td>Eligible births for the PPIUD</td>
<td>7173</td>
<td>7002</td>
<td>14175</td>
</tr>
<tr>
<td>Number of patients opting for PPIUD</td>
<td>98</td>
<td>113</td>
<td>211</td>
</tr>
</tbody>
</table>

3.1.2. Evolution of use of PPIUD from 2015 to 2017

Frequency of use of PPIUD doubled in two years.

![Figure 1. Distribution of PPIUD insertions by year](image)

3.1.3. Prevalence of Use of PPIUD

Among the 14175 eligible deliveries, 211 chose PPIUD, which is a prevalence of PPIUD use of 1.49% during our study period.

![Figure 2. Progression of the prevalence of PPIUD use](image)
3.2. Socio-demographic Characteristics of Clients

3.2.1. Age of Clients

The average age of clients was 31 years with extremes of 16 and 49 years. The age group of 30 to 34 years was the most represented.

3.2.2. Socio-demographic Characteristics of Clients by Level of Education and Occupation

Secondary and primary education levels dominated in our work. Women who had a liberal activity predominated in our series.

Table 2. Socio-demographic characteristics of clients by level of education and occupation

<table>
<thead>
<tr>
<th>Level instruction</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uneducated</td>
<td>29</td>
<td>13.74</td>
</tr>
<tr>
<td>Primary</td>
<td>74</td>
<td>35.07</td>
</tr>
<tr>
<td>Secondary</td>
<td>83</td>
<td>39.34</td>
</tr>
<tr>
<td>University</td>
<td>25</td>
<td>11.85</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>household</td>
<td>27</td>
<td>12.80</td>
</tr>
<tr>
<td>Pupils / Students</td>
<td>18</td>
<td>8.53</td>
</tr>
<tr>
<td>liberal *</td>
<td>139</td>
<td>65.87</td>
</tr>
<tr>
<td>officials</td>
<td>27</td>
<td>12.80</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
</tbody>
</table>

* resellers, traders, seamstresses, hairdressers, ...

3.2.3. Socio-demographic Characteristics of Patients According to Their Marital Status, Parity, and Gestity

The women living in concubinage were in the majority in our study as well as the paucigestes and paucipare.

Table 3. Socio-demographic characteristics of patients according to their marital status, parity, and gestity

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>singles</td>
<td>27</td>
<td>12.80</td>
</tr>
<tr>
<td>concubines</td>
<td>120</td>
<td>56.87</td>
</tr>
<tr>
<td>married</td>
<td>64</td>
<td>30.33</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parity</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>primiparae</td>
<td>30</td>
<td>14.22</td>
</tr>
<tr>
<td>Pauciparae</td>
<td>93</td>
<td>44.08</td>
</tr>
<tr>
<td>Multiparous</td>
<td>72</td>
<td>34.12</td>
</tr>
<tr>
<td>Large multipares</td>
<td>16</td>
<td>7.58</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>gravidity</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>primigravidae</td>
<td>21</td>
<td>9.95</td>
</tr>
<tr>
<td>Paucigestes</td>
<td>93</td>
<td>44.08</td>
</tr>
<tr>
<td>Multigravidae</td>
<td>72</td>
<td>34.12</td>
</tr>
<tr>
<td>Large multigravidae</td>
<td>25</td>
<td>11.85</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>100.00</td>
</tr>
</tbody>
</table>

3.2.4. Socio-demographic Characteristics of Clients Based on Their Number of Live Children, the Number of Deaths Born and the Location of Prenatal Consultation (NPC)

One of the 211 women (0.47%) had no live children. Of the 211 deliveries, 43 (20.38%) had a history of stillbirths, the proportion of which is defined in the following table.
Of the 211 women who were delivered, 50 (23.70%) had a history of abortions.

Table 4. Socio-demographic characteristics of clients based on their number of live children, the number of deaths born and the location of prenatal consultation (NPC)

<table>
<thead>
<tr>
<th>Distribution according to the number of live children</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>80</td>
<td>38,10</td>
</tr>
<tr>
<td>3 - 4</td>
<td>103</td>
<td>49,05</td>
</tr>
<tr>
<td>More than 4</td>
<td>27</td>
<td>12,85</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
<td>100,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distribution in function of the number of dead born</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>40</td>
<td>93,02</td>
</tr>
<tr>
<td>3 - 4</td>
<td>3</td>
<td>6,98</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100,00</td>
</tr>
</tbody>
</table>

Breakdown by number of NPC*

| 1 – 2                                                  | 46     | 92 |
| 3 - 4                                                  | 4      | 8  |
| Total                                                  | 50     | 100,00 |

<table>
<thead>
<tr>
<th>Distribution according to the location of the NPC</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHU/CHR**</td>
<td>110</td>
<td>52,38</td>
</tr>
<tr>
<td>HD/CMS/USP***</td>
<td>93</td>
<td>44,29</td>
</tr>
<tr>
<td>Private clinic</td>
<td>3</td>
<td>1,43</td>
</tr>
<tr>
<td>Delivery house</td>
<td>4</td>
<td>1,90</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
<td>100,00</td>
</tr>
</tbody>
</table>

*NPC prenatal consultation
**University Hospital Center / Regional Hospital Center
*** District Hospital / Medical Social Center / Peripheral Care Unit.

4. Discussion

4.1. Frequency

From October 1, 2014 to September 30, 2016 out of a total of 18170 births registered in the gynecological obstetric clinic of the Sylvanus Olympio CHU in Lome, 14175 (78%) deliveries met the criteria of medical admissibility of the WHO for the use of IUDs and 211 benefited from postpartum IUD insertion, a prevalence of 1.49% of eligible clients. Sidibé K. [6] in his study, a predominance of the age group of 35-39 years, 26.5% of cases. Diatta A. [16] in 2008 in Kolda, Senegal, also found a predominance of the age group of 35-39 years (36.66%) against 13.33% for the age group of 30-34 years. Our differences can be explained by the fact that the PPIUD is generally used in Togo in order to space births paradoxically to the Sahelian countries (Mali and Senegal) where it is used for birth limitation because of the great multiparity.

4.2. Sociodemographic Characteristics of Clients

4.2.1. Age

The average age of our clients was 31 years old with extremes of 16 and 49 years old. The age group of 30-34 years was the most represented with 33.65% of cases. Sidibé K. [6] found in his study, a predominance of the age group of 35-39 years, 26.5% of cases. Diatta A. [16] in 2008 in Kolda, Senegal, also found a predominance of the age group of 35-39 years (36.66%) against 13.33% for the age group of 30-34 years. Our differences can be explained by the fact that the PPIUD is generally used in Togo in order to space births paradoxically to the Sahelian countries (Mali and Senegal) where it is used for birth limitation because of the great multiparity.

4.2.2. Level of Education

In our study, high school deliveries were predominant, with a rate of 39.34%, followed by those at the primary level (35.07%). Diatta A. [8] and Sidibé K. [6] found a predominance of out-of-school, 78.3% and 55.3% respectively. We believe that this discordance is due to the high schooling of Togolese girls, contrary to the realities in predominantly Muslim Sahelian countries with the influence of religious schools, particularly Koranic schools. Surveys conducted in these countries had given illiteracy rates of 66.9% in Mali (2015) [9] and 54.6% in Senegal (2012) [10] against 43.3% in Togo (2016) [11].

4.2.3. Profession

One hundred and thirty-nine of our clients, 65.87% of the cases, were professionals. Diatta A. [8] found a predominance of housewives with a 97% rate. This discrepancy could be explained by cultural differences and especially that Diatta in his study had found that 85% of the clients came from rural areas.

4.2.4. Marital Status

Cohabitating clients predominated in our study with a rate of 56.87%. Sidibé K. [6] found a net predominance of brides with a rate of 87.8%. This difference can be explained by the fact that in Togo, married women are those who have made a civil marriage while in Mali, religious and traditional marriages are considered. The predominance of cohabiting women in our study could be explained by their desire to limit births given their marital status.

4.3. Gynecological Obstetric History

4.3.1. Gravidity - Parity

The paucigestes/pauciparas and the multigestes/multiparas were the most represented with the respective rates of...
44.08% and 34.12% while the large multiparas were only 7.58% in our series. Sidibé K. [6] found a predominance of multiparas (30.9%) and large multiparas (29.9%) followed by pauciparas at 23.7%. Diatta A. [8], meanwhile, had a clear predominance of large multiparas (60%) followed by multiparas (23%) against only 8% of pauciparas. Our divergences would always be explained by cultural reasons where in the Sahelian countries, large multiparas are generally more represented with sometimes 7 to 8 children on average, even 16 children according to Sidibé K [6].

4.3.2. Number of Living Children

In our series, the average number of children per woman is in the order of 3 to 4 (48.82%). We found that women with more than 4 children were less represented at 12.8%. In the Sidibé K. series [6], women with more than 4 children were 47.1%. The socio-cultural factors of these different countries could explain this gap.

4.3.3. Conduct of Prenatal Consultation (NPC)

Nearly 70% of our clients had benefited from at least 4 NPC during their pregnancy. We found that 96.21% of our clients were followed in public facilities during their pregnancy, including 52.38% in the CHRs and CHUs. Their NPCs were provided mainly by gynecologists (53.81%) and midwives (44.29%). The review of the literature did not allow us to have information on these indicators. Also in our context, data carriers, including admission and delivery records, and even some files, did not have enough information on these parameters to extend our analyzes to all eligible deliveries for the first time, insertion of the PPIUD. This information from several beneficiaries of the PPIUD in our study were completed during their post-insertion follow-up.

5. Conclusion

The intrauterine device is a modern contraceptive method that meets the unmet need for contraception in the postpartum. Thus, Togo, like other countries such as Egypt and Kenya, opted for its insertion in the immediate postpartum. In our 24-month study, the benefits of providing contraception to the intrauterine device TCu380A in the immediate postpartum far outweigh the disadvantages. This is confirmed by the satisfaction rate of 87.20% against 3.32% of disappointment with a failure rate of 0.47%. For this reason, the promotion of this method must be maintained in order to reduce the need not satisfied with contraception and promote the health of couples and families.

References