Pattern of Family Planning Utilization amongst Patients Who Underwent Successful Obstetrics Fistula Repair in Kaduna and Sokoto States

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Introduction

Nigeria is committed to the new slogan of the Sustainable Development Goals (SDGs) i.e, to leave no one behind [1]. This is in consonance with its target of ensuring universal access to quality Reproductive Health (RH) services and information to every woman including those marginalized and the vulnerable.

The Nigeria Government has set a target on CPR of 36% by 2018 [2]. Although there has been a marginal increase in Nigeria CPR from 12.6 to 14.6 in five years for
all methods more concerted interventions to increase access and utilization in States within the Northern region where CPR ranges between 3-16% for all methods is required [3]. These include the need to meet the huge unmet need and reduce missed opportunities. The link between high unmet need, maternal deaths and OF was reemphasised by the UNFPA Executive Director Babatunde Osotimehin [4].

There are about 400,000 - 800,000 women living with OF in Nigeria and about 20,000 more women develop this condition annually [5]. Although OF indicates a failure of safe motherhood especially emergency obstetric care, it is also an indication of survival from maternal mortality, quality of care and level of health facility delivery. A root cause of fistula is a lack of sexual and reproductive rights for women [6]. Thus the London FP2020 summit emphasized the principles of equity and non-discrimination especially for marginalized women, including those who have had fistula repair, who are hard to reach and who may in addition face financial and social barrier that will prevent them from accessing FP services. Therefore their contact with health facility for OF management is an opportunity to provide them with the full range of RH services and information including FP.

The States of Kaduna and Sokoto are located in Northwest Nigeria. These states are inhabited mainly by people of Hausa - Fulani descent, but there are several other indigenous minority ethnic groups and settlers from within and outside Nigeria. The States each has a total projected population of 8,314,491 and 5,035,716 respectively as at 2016 respectively [7] (Table 1). These States are inhabited mainly by people of Hausa - Fulani descent, but there are several other indigenous minority ethnic groups and settlers from within and outside Nigeria. The States each has a total projected population of 8,314,491 and 5,035,716 respectively as at 2016 respectively [7] (Table 1). Although these States are governed by modern democratic system, there still exist strong male dominated traditional feudal systems with stronghold at the community level. Virtually all aspects of the society are male dominated; politics, economy, commerce, education, culture and religion [8]. Most of the population are Muslims.

With the exemption of the State capitals and Zaria city, the vast majority of the settlements are semi-urban or rural. Agriculture is the most important and commonest economic activity in these States. The working population is a mix of both skilled and unskilled workers engaged as civil servants, artisans and trading. The States have an average literacy level of 45% while about 60% of the population live below the poverty line [9,10].

The major Obstetric Fistula (OF) repair units in the States are located within Gambo Sawaba General Hospital (GSGH) Zaria and Maryam Abacha Women and Children’s Hospital (MAWCH) Sokoto.

The GSGH OF unit is situated within the hospital in Zaria, Kaduna State. The city is second in size only to the State capital, Kaduna, and is about 78 kilometers from Kaduna town the State capital [11]. The unit was established in 1996. Although it is located within the general hospital, financially, it operates independently of the parent hospital. It however, receives support of staff from the hospital, as needed. It is staffed by four full time health workers - 1 nurse and 3 attendants. Theatre staff and other supporting staff are drawn from the main hospital whenever surgical repairs are to be conducted. The unit has 1 theater, 40 beds in 2 wards; a rehabilitation/skills acquisition hall and a kitchen. Since 1996, over 1,500 fistula repairs have been carried out at the unit, with a success rate of over 90%. All repaired fistula survivors are referred to the main hospital’s family planning unit for counseling and FP services.

Maryam Abacha Women and Children’s Hospital (MAWCH) in Sokoto State was founded by a former first lady as the first national hospital specifically for women and children. Amongst other services, it offers comprehensive emergency obstetric care and family planning services. Fifty beds are available to women undergoing fistula repair surgery [12]. Administrative data showed that the unit repaired 492 cases between 2013 and 2015. Most of the repairs were done by Dr. Kees Waaökjk supported by two resident doctors in the unit.

The units receive support for fistula repairs and rehabilitation of survivors from United Nations Population Fund (UNFPA), Rotary International, The Japanese International Cooperation Agency (JICA) and individual philanthropists.

Nigeria intends to improve its CPR from the present 15% to 36% in 2018 [2]. This target may be easier to achieve for Kaduna State which is expected to attain a CPR of 46.5% from its present 20% but poses more challenge for Sokoto State which will be expected to attain CPR of 20% from its present 1% [13]. These requires provision of FP services and information at every contact with the health system including the OF repair units.

**Study Rational**

OF is a devastating medical condition which is mostly preventable and treatable. It occurs as a result of prolonged, obstructed labour due to lack of adequate medical care, notably timely access to a life-saving emergency caesarean section. Over 2 million women and girls suffer from OF globally [14]. These high numbers reflect underlying failure to tackle broader health, socio-economic and gender inequities as well as child marriage and teenage pregnancy.

Although OF can be repaired by an expert fistula surgeon, not all cases have access to this treatment. Presently about 20,000 women had fistula repairs annually but about 50,000 new cases occur annually leaving an annual backlog of about 30,000 [14].

FP is a proven strategy to reduce maternal morbidity and mortality [15]. It is the best strategy to reducing fistula cases among women of reproductive age in Nigeria [15]. It is therefore

<table>
<thead>
<tr>
<th>S/No</th>
<th>Indices</th>
<th>Kaduna</th>
<th>Sokoto</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Contraceptive Prevalence Rates (CPR)</td>
<td>20</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>% Unmet Need</td>
<td>6</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Antenatal Clinic Attendance (ANC) rates</td>
<td>55.8</td>
<td>20.3</td>
<td>66.1</td>
</tr>
<tr>
<td>4</td>
<td>% Skilled birth attendant at delivery</td>
<td>35.5</td>
<td>5.4</td>
<td>38.1</td>
</tr>
<tr>
<td>5</td>
<td>% Health facility delivery</td>
<td>32.4</td>
<td>4.7</td>
<td>35.8</td>
</tr>
</tbody>
</table>

Source: 2013 National Demographic Health Survey

Table 1: Reproductive Health Indices for Kaduna and Sokoto States.
an integral part of OF prevention [16]. Also in order to achieve complete healing, most post repaired OF patients are advised to abstain from sex for three months or more [17]. Thus the use of a FP method will allow the women to resume sexual activities after the abstinence period of 3-6 months without the risk of another pregnancy before healing [13,17,19]. It will also protect a repaired OF, prevent breakdown and recurrence by delaying pregnancy [17].

Globally, there is a high awareness of modern contraception among OF patients but only few actually utilize any modern contraceptive method after surgical repair. A study in South East Nigeria reported 95.7% awareness but only 37.2% utilization of contraceptives after surgery [16]. Reasons adduced for the low utilization after OF surgical repairs ranges from socioeconomic grounds, myths, religious and cultural beliefs [16].

It is sometimes assumed that women repaired of OF are not interested in FP services because they might have lost a baby in the preceding pregnancy [15]. Studies have reported high unmet need for FP among OF patients across the globe. Studies indicate that they are interested in using FP if they know about it during their post-operative period [15]. More than 76% of OF patients in four Kenya referral centres expressed their willingness to access FP services after the fistula repair [19]. Therefore enabling women to access FP services can greatly reduce their chances of developing OF because it gives them more control over the “when and how” of their pregnancies [6].

The need to integrate FP services and information at all stages of fistula care has been affirmed by several studies, projects and programmes [16,17,19]. A well-integrated FP-fistula service will help to ensure that FP is an integral part of OF treatment, not an additive service [17]. Therefore, FP messages should be included in the regular care of OF patients as recommended by the 2003 joint UNFPA-Engender Health facility assessment conducted in Uganda [20]. This integrated approach has been found to improve the uptake of FP methods by OF clients [16].

Also FP counseling not only delays a future pregnancy until complete healing is achieved, it can also help women who want to achieve successful pregnancy to increase their chances through increased fertility awareness [17]. Therefore post repair FP information will empower the women to make their own reproductive decisions and respects their rights to reproductive self-determination [17]. Several country reports indicated between 60-70% of OF clients counseled choose a FP method [16].

It is therefore the aim of this study to assess the pattern of FP utilization by post OF repaired client in two major fistula units of North Western Nigeria. The study objectives will be to assess the prevalence of FP utilization amongst repaired OF clients in the units, to determine the annual trend of FP utilization amongst the repaired OF clients and to identify ways of improving FP utilization by repaired OF clients.

Methodology

The study was conducted in the OF and FP units of GSGH in Zaria, Kaduna State and MAWCH in Sokoto, Sokoto State. The study was combinations of cross-sectional descriptive desk review and key Informant Interviews to collect qualitative and quantitative data on FP services and information in the units.

The desk review entails collection of all FP and OF registers used in the year 2011 to 2015 from the respective units. Then all available FP service utilization data for the period were extracted onto a data template in SPSS 20 by a member of the study team. The data capturing template was designed on SPSS 20 to include all the indices in the National FP register like the clients sociodemographic characteristics, obstetrics history, OF repairs and utilization of FP.

The list of all OF patients admitted for repair during the five year period was extracted from the OF register of which those of them that accessed FP services after their repair were identified in the OF register. A total of 1015 OF clients were registered for repair but only 305 of them registered for FP services in the 5 years study period in the two units. All the data were analysed using the same software to generate frequency statistics, tables and charts.

The KI used a designed questionnaire consisting of closed and open ended questions ranging from sociodemographic data, information provided by the health care workers at counseling, information of FP utilization by OF clients in the units, their training needs and challenges related to FP service provision. Additional questions specifically directed at the repaired OF clients include their past educational, obstetric and surgical history, counseling experience, their knowledge, attitude, practice and behavior on post repair FP use.

All the repaired OF clients available in the units and the health workers presently working in the two units were separately interviewed after consent by a trained interviewer. A total of 8 health workers available in the two units and 18 repaired OF clients that were either on admission or visited the units during the data capturing period of July to November, 2016 were interviewed. The data were collated and analysed on Microsoft Excel sheets to generate basic statistical indices of percentages, means and total summation of responses.

Ethical clearance and approval were obtained from the departments of planning research and statistics of the respective States Ministries of Health while the facility Directors gave permission to review fistula clients’ records including the key informant interviews for its health providers and clients. Each of the respondents gave their verbal consent prior to the interview after due explanation of the purpose, process and conditions as stated on the questionnaire by the interviewer. The interview took place in the office of the nurse-in-charge of the unit.

Results

Review of Obstetric Fistula and Family Planning registries

The majority of clients were from Kaduna and Sokoto States while about 10% came from the immediate neighboring States and across the nation’s border from Niger and Chad Republics. Their ages ranged from 13-48 years with an average of 22.7 years. About one quarter (19.3%) are under 18 years of age.

Their parity ranged from 0.0 -1.20 with an average of 2.0. About 13% of them had no living child while another 13% had parity higher than 4. All the clients admitted to have been counseled on FP during their stay in the units.
The annual trend of FP utilization rates by repaired OF client in the registers is depicted in Table 2 and fig 1. The utilization for all methods has been on the decline in Sokoto but more or less stabilized at about 30% in Zaria. The two units reported an average prevalence rate of FP utilization of 30 percent (Figure 1).

The common FP methods used in Sokoto and Zaria units were implants (44.6% and 78.6% respectively) and injectables (48% and 8.7% respectively). There were no users of permanent and natural methods. The common implants administered in the units were Implanon (54.4%) and Jadelle (45.6%) while the injectables were Depo provera (61%) and Noristerat (39%) Figures 2 and 3.

Interview of Obstetric Fistula Care Providers

The key informant interviews conducted for all 8 health workers in the two units revealed none of them in OF units were trained on FP but 88% of them counsels OF patient pre and post-operative and then referred to FP clinic on discharge (Table 3).

The types of information provided during counseling includes the FP methods available; health benefits of FP to mother and baby; importance of child spacing to regain health after post repair Elective Cesarean Section (ELCS); advice not to get pregnant in next 6months after repair; the need to attend FP clinic; abstinence from sex till after 6months and

![Figure 1: Annual Trend of FP Utilization amongst Repaired OF Clients](image)

![Figure 2: FP Commodities Provided for Repaired OF Client – Zaria](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Repaired OF that accessed FP</th>
<th>Total OF repaired</th>
<th>%</th>
<th>Repaired OF that accessed FP</th>
<th>Total OF repaired</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>27</td>
<td>27</td>
<td>100</td>
<td>21</td>
<td>85</td>
<td>24.7</td>
</tr>
<tr>
<td>2012</td>
<td>41</td>
<td>43</td>
<td>95.3</td>
<td>27</td>
<td>64</td>
<td>42.2</td>
</tr>
<tr>
<td>2013</td>
<td>29</td>
<td>131</td>
<td>22.1</td>
<td>20</td>
<td>94</td>
<td>21.3</td>
</tr>
<tr>
<td>2014</td>
<td>52</td>
<td>182</td>
<td>28.6</td>
<td>37</td>
<td>114</td>
<td>32.5</td>
</tr>
<tr>
<td>2015</td>
<td>20</td>
<td>179</td>
<td>11.2</td>
<td>31</td>
<td>96</td>
<td>32.3</td>
</tr>
</tbody>
</table>

Table 2: Annual Prevalence of FP Utilization by Repaired OF Clients in Sokoto & Zaria

<table>
<thead>
<tr>
<th>No</th>
<th>Interview Questions</th>
<th>Summary Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you been trained on FP service provision?</td>
<td>100% not trained on FP</td>
</tr>
<tr>
<td>2</td>
<td>If yes, how many of the nursing staff in this unit have been trained on FP?</td>
<td>Non in OF units trained on FP</td>
</tr>
<tr>
<td>3</td>
<td>Do you counsel OF repaired patients before and after repairs?</td>
<td>88% counseled OF patient pre and post-operative.</td>
</tr>
<tr>
<td>4</td>
<td>What are the procedure for your repaired fistula clients to access FP counseling and services</td>
<td>Pre and post-operative counseling were provided to OF client and then referred to FP clinic on discharge.</td>
</tr>
<tr>
<td>5</td>
<td>Kindly share with us some of the information provided to the clients during counseling</td>
<td>Information shared at counseling includes; FP methods available, health benefits to mother &amp; baby, importance of spacing to regain health after ELCS post repair, do not get pregnant in the next 6months, go to FP clinic, no sex till after 6months, no pregnancy till after 12 months, drink plenty of water, no sex, no hard work, delay pregnancy for 6months, attend FP clinic, sexual abstinence, take FP after 6months, attend ANC when pregnant, no sex till after 6months, no pregnancy till after 12 months, no sex till after 6months, and next delivery should be by ELCS.</td>
</tr>
<tr>
<td>6</td>
<td>What is the estimated awareness rate</td>
<td>Awareness ranged from 8-100% with average of 85%</td>
</tr>
<tr>
<td>7</td>
<td>Estimated utilization rate</td>
<td>Utilization ranged from 5-80% with an average of 71%.</td>
</tr>
<tr>
<td>8</td>
<td>Why do you think the uptake of FP may be low in this place?</td>
<td>Although one respondent believed FP uptake is not low, most believed it was low because the OF client wants more children having lost the first one, lack of FP training by staff, ignorance, religious / traditional belief and outright rejection of FP by clients.</td>
</tr>
<tr>
<td>9</td>
<td>What commodity do you think is commonly preferred by OF patients</td>
<td>Implants by 100% and injectable (Noristerat) by 38% of the client</td>
</tr>
<tr>
<td>10</td>
<td>Why?</td>
<td>Reasons adduced include long duration, less side effect, ease of use, effective and better compliance.</td>
</tr>
<tr>
<td>11</td>
<td>How can the utilization of FP services by post VVF repaired patient be improved in this environment?</td>
<td>Suggestion for improvement includes sensitization, improve counseling and staff training.</td>
</tr>
<tr>
<td>12</td>
<td>As health workers, what are the challenges you face in FP service provision for repaired OF patients</td>
<td>The major challenge mentioned is staff not being trained on FP. Other minor ones are client ignorance on FP, inadequate manpower and payment by client for consumables.</td>
</tr>
<tr>
<td>13</td>
<td>Other comments</td>
<td>Request was made for training of more staff on FP counseling and service provision.</td>
</tr>
</tbody>
</table>

Table 3: Summary of Key Informant Interviews Conducted for Health Workers in OF Units, Sokoto and Zaria
not to get pregnant until after 12 months post repair; clients should drink plenty of water; clients should reduce hard work; the need to attend ANC when pregnant; and that the next delivery should be by ELCS. The FP awareness of OF clients as reported by service providers ranged from 8-100% with average of 85%.

Also responses from OF service providers indicated FP utilization by repaired OF client ranged from 5-80% with an average of 71%. Although one health worker believed that FP uptake by OF client is not low, but most believed it was low because the OF client wants more children having lost the first one, the lack of FP training by OF clinic staff, ignorance of OF client, their religious / traditional belief and outright rejection of FP by OF clients. They said all OF client prefer implants while some 38% may opt for injectable (Noristerat) as alternative. The reasons adduced for these preferences include its long duration, less side effect, ease of use, product effectiveness and better compliance.

The staff suggestions for improvement of FP utilization amongst OF client include sensitization, improved counseling and staff training.

The major challenges mentioned by OF unit staff are lack of training on FP service provision, client ignorance on FP, inadequate manpower and payment by client for consumables.

All the health care worker respondents requested for trainings on FP counseling and service provision.

**Interview of Obstetric Fistula Clients**

The key informant interviews were conducted for eighteen available post repaired OF clients that were either resident in or visited the units during the study period (Table 4). The OF clients were mostly uneducated (only 22% attended up to primary school) with an average parity of 3.6 per woman. Some 88% and 40% of clients in Sokoto and Zaria respectively had no child alive. The average frequencies of OF repairs were 1.9 and 1.4 per client in Sokoto and Zaria respectively. Between 70-87% were aware of FP while 12.5% to 60% of them were counseled on FP methods and the importance of child spacing.

About 75% of the respondents in Sokoto think FP is useful but none of them liked it nor used any method because of the reasons stated below. Also 70% of the respondents in Zaria liked FP but only 60% used a method (mostly Implants and Depoprovera).

Reasons given for not using any method include no child alive, divorced, postmenopausal or not informed about FP. Suggested recommendations by the OF clients to improve FP utilization included pre-operative counseling and the provision of more FP information and services.

### Table 4: Summary of Key Informant Interview for OF clients in Sokoto and Zaria

<table>
<thead>
<tr>
<th>S/No</th>
<th>Interview Questions</th>
<th>Average</th>
<th>Range</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How old are you?</td>
<td>35.6</td>
<td>25-50</td>
<td>28</td>
<td>18-42</td>
</tr>
<tr>
<td>2</td>
<td>No of Pregnancies</td>
<td>1.5</td>
<td>1-4</td>
<td>5.7</td>
<td>1-11</td>
</tr>
<tr>
<td>3</td>
<td>No of Deliveries</td>
<td>1.5</td>
<td>1-4</td>
<td>4.8</td>
<td>1-10</td>
</tr>
<tr>
<td>4</td>
<td>No of Children alive</td>
<td>0.4</td>
<td>0-3</td>
<td>3</td>
<td>0-6</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>0.1</td>
<td>0-1</td>
<td>1.4</td>
<td>0-4</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>0.2</td>
<td>0-2</td>
<td>1.6</td>
<td>0-5</td>
</tr>
<tr>
<td>7</td>
<td>Years of education</td>
<td>0</td>
<td>0</td>
<td>2.5</td>
<td>0-9</td>
</tr>
<tr>
<td>8</td>
<td>Level of education</td>
<td>0</td>
<td>0</td>
<td>60% Nil (Arabic), 30% Primary, 10% Secondary</td>
<td>0-2</td>
</tr>
<tr>
<td>9</td>
<td>Had VVF done?</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>No of times VVF done</td>
<td>1.9</td>
<td>1-4</td>
<td>1.4</td>
<td>1-3</td>
</tr>
<tr>
<td>11</td>
<td>Awareness of FP</td>
<td>87.50%</td>
<td>70% aware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Counseled on FP</td>
<td>12.50%</td>
<td>0-1</td>
<td>60% counseled</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Counseling Information provided</td>
<td>Told to commence FP after next delivery, but now divorced.</td>
<td>FP methods &amp; importance of spacing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Attitude to FP</td>
<td>62.5% Dislike, 37.5% Indifferent</td>
<td>70% like, 20% dislike, 10% DK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Why the attitude to FP</td>
<td>No reasons provided</td>
<td>Good to rest; had no child alive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Commenced FP method?</td>
<td>100% No</td>
<td>60% commenced FP.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Reasons if No FP method commenced</td>
<td>Divorced, postmenopausal, want a child, not informed, Nil</td>
<td>No child alive, no FP information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>If Yes, type of FP Method commenced</td>
<td>0</td>
<td>50% implants, 10% Depoprovera</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Client Opinion on FP</td>
<td>75% useful, 25% indifferent</td>
<td>100% support FP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Suggestion for improvement of FP utilization</td>
<td>Provision of FP information and services</td>
<td>pre-operative Counseling, more information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussions

Findings and Interventions

The study determined the prevalence and trend of FP utilization in the two OF units and identify ways of improving FP utilization by repaired OF clients in these units.

Majority of the clients were from the States hosting the OF units and the neighboring States. Their ages ranged from 13-48 years with an average of 22.7 years. Similar average age was reported from a study of four OF referral centres in Kenya [19], though another study of OF in five developing countries including Nigeria reported a slightly higher average age of 25 years with a range of 20-35 years.21 About a quarter (19.3%) of them were under 18 years of age which is the official age of marriage in Nigeria.

Parity of study population ranged from 0 -12 with an average of 2. Thirteen percent of them had more than 4 parity. Other study had reported the same median parity of 2.0 with a range of 1.0-5.0 [21]. These substantiates the fact that OF can occur amongst both nulligravida and multigravida women as long as timely emergency obstetric care is not provided as and when needed.

In line with one of the indicators of OF reintegrations services recommended by measures of evaluation, % of women who have been treated for OF who received FP or birth spacing counselling’s [22], the annual prevalence rates of FP utilization reported from Sokoto by repaired OF patient for the study period ranged from 100% in 2011 to 11.2% in 2015 while the OF unit in Zaria reported an annual prevalence range of 24.7% in 2011 to 42.2% in 2012 percent. This gives an average prevalence of 30 percent from the two units. This is lower but closer to the utilization rate of 37.2% reported from South East Nigeria [18]. It is also much lower than the prevalence of 59.1% and 87% reported from other studies [16,21]. The lower figure reported may not be unrelated to the data source knowing that health facilities are prone to incomplete documentation of services, poor data storage and multiplicity of data tools. Actually OF data for January to June 2011 and May to December 2015 were missing in Sokoto unit. The declining trend in Sokoto and the improvement in Zaria aligned with the reports of the last two National Demographic Health Surveys (NDHS) for those States [3]. Nevertheless the result nullifies the unsubstantiated assumptions by providers that women have neither interest in nor need for FP after OF repair because of loss of the baby [16]. On the contrary a formal counselling programme has shown that many clients are open to the idea of FP and willing to practice it right away [23].

The results revealed that the common FP methods used in Sokoto and Zaria units were implants (446% and 78.6% respectively) and injectables (48% and 8.7% respectively). This is contrary to the five countries study which reported injectables (43.7%), oral contraceptives (23.9%) and long acting and permanent methods (2.0%) as the most widely used methods [21]. The later study is also substantiated by a 2013 USAID Fistula Care evaluation report that indicated injectables and oral contraceptives as the most commonly used FP methods by OF clients [16]. Another study reported male condom (71.4%) and hormonal injections (20.0%) as most commonly used methods [18]. The current preference for the Long Acting Reversible Contraceptives (LARC) may not be unrelated to the advancement in FP technology and global promotion of its use which was facilitated by the removal of user-fees in some countries including Nigeria. Considerations on choice methods of FP commodity for OF client depend on their plans for child spacing or limiting. The pill, Standard days method, Male and Female condoms are recommended for those who wants to have a baby soon after healing [24]. These are better suited for those who want to delay first pregnancy after fistula repair and healing, while implants and IUDs are recommended for those who want to delay pregnancy for a long period or may not want any more children [24]. The male and female sterilizations are for those who do not want any children in the future [23].

The method choice also brings to the bear the question on quality of FP counseling provided at the units in terms of neutrality, clarity of information, provider bias and freedom of choice. A report once confirmed that 25% of FP providers did not help the client consider her options or reconfirms her choice during counseling [16].

The key informant interviews conducted for eight available health workers in the units revealed none of them in OF units were trained on FP service provision but 88% of them counseled OF patient pre and post-operative and then referred them to FP clinic on discharge. The counseling skills must have been acquired from previous programmes which included FP in the counseling training offered to staff in fistula units [15,16,23]. Several studies confirmed that OF clients are being counseled about benefits of FP and they are complying [15,21]. One of the studies confirmed that 90% of the women were counseled for FP during their stay in the OF center which is in agreement with the present study [21]. Reported information shared at counseling includes the FP methods available; health benefits of FP to mother and baby; importance of child spacing to regain health after post repair ELCS; caution not to get pregnant in the next 6months; the need to attend FP clinic; abstinence from sex till after 6months and not to get pregnant till after 12 months; need for clients to drink plenty of water; need to reduce hard work; advise to attend Ante Natal Clinic (ANC) when pregnant; and ELCS in next pregnancy. All these are in line with professional advice that women should avoid sex until six months after repair and same duration before the next pregnancy while she is on child spacing method to allow for healing [15,23].

OF client FP awareness as reported by service providers ranged from 8-100% with an average of 85%. This is about the same level (95.7%) of awareness reported from a 2015 study of post OF repaired client from South East Nigeria [18]. All these support the fact that the gap is not of knowledge but of practice. Also the technique of the counseling sessions need to be reviewed as suggested by a study which observed that some of the FP providers were uncomfortable discussing sexuality and clients’ relationships with partners; several lacked different types of communications skills, such as being able to ask open-ended questions, paraphrase the clients’ responses and questions, or use simple language; specifically 33% of the providers did not adhere to the medical eligibility criteria; neither thanked the client at the end of the session; nor explore the woman’s feelings [16].

According to OF service providers, the FP utilization by repaired OF client ranged from 5-80% with an average of 71%. Although one health worker believed that FP uptake by OF client
is not low, but most believed it was low because the OF client wants more children having lost the first one, the lack of training on FP by OF clinic staff, ignorance by OF client, their religious / traditional belief and outright rejection of FP by OF clients. They also said 100% of OF client prefers implants while 38% prefers injectable (Noristerat). These corroborate the findings in the FP registers (Figures 2 and 3). The reasons adduced for preference for these FP methods include their long duration, less side effect, the ease of use, effectiveness and better compliance.

Documented options for the promotion of FP service utilization by repaired OF clients include referrals by health workers in fistula clinics to outside FP services, offering of initial counseling for FP services within the same institution or to provide integrated care for both OF and FP [25]. Also previous studies have recommended that staff already working with fistula clients should be further trained to provide FP services [25]. This is highly essential to achieve improvement in the quality of FP information and services [26] and should be facilitated by providers who have experience in providing FP [22]. These agree with the OF staff suggestions for improvement of FP utilization amongst OF client which includes clients sensitization, improve counseling and staff training, Training skills in balanced counseling, management of secondary infertility and two-way referral should be provided to ensure a wholistic approach to the needs of the OF clients.

Table 4 showed that the post repaired OF clients is mostly uneducated (22% attended primary school) as also reported in previous studies [18]. Also the study amongst OF clients seen in four referral centers in Kenya showed that only 1.7% reported tertiary-level education, 56.7% reported primary-level education [19]. It is interesting to note that none of the respondents in Sokoto either liked FP or uses any method but 75% of them think it is useful. This requires in depth elucidation of why a perceivably useful intervention is neither liked nor used by clients.

Although fear of adverse effects (40.7%), future desire for more children (29.7%), religious prohibition (22.0%), cultural beliefs (24.6%), and partner disapproval (35.6%) were documented as reasons for non-use of contraception [18]. The reasons given for none use of FP methods were almost identical with the later despite the counselling rate of 12.5% - 60% and an awareness level of between 70-87% on FP methods and the importance of spacing. The findings in this study include the lack of any child alive, divorce, postmenopausal or not informed aboutFP. If women actually have the number of desired children, then the fear of adverse effect, religious and cultural beliefs may not be very important as indicated by the OF clients interviewed.

Strengths and Weaknesses of the programme

The report hinged on three major sources of information—health facility records, health provider information and client’s responses. The corroboration of these three evidences will provide an almost 100% authentic inference and conclusions.

The limitations of the study includes incomplete data in the facility FP register and the small sample size for the client KII which is also linked to the incomplete contact address in the FP register thus making client tracing almost impossible. Infact the initial study was designed for three OF units, but one of the units was dropped because of the severely incomplete and incomprehensible data in its FP register. Also the number of KII responses by the health workers in the OF repair centres was limited by the unwillingness of health workers to serve in the units. Moreover about three medical doctors in the two units were also not available for the KII.

It was also observed that the FP registers did not distinguish between fistula clients and non-fistula clients, but the former were identified by the fistula unit health workers using their own unit records corroborated with their institutional memory.

Relevance of the findings: Implications for clinicians and policy makers

The low prevalence of FP utilization and the limitation of choice to implants and injectables raises a lot of question on the quality of counselling, freedom of method choice and compliance to referral advices by the OF clients. The obvious missed opportunity for FP service amongst these survivors of maternal deaths need to be addressed.

This calls for review of the implementation of existing integrated approach to reproductive health services especially the need to provide all related service package under one roof and possibly by the same health provider. This will entail the review of the training package for OF providers to include additional skill on FP provision, the management of secondary infertility and balanced counselling in line with the service protocol [27]. There is also the need to review the effectiveness of the free FP services in the public sector in the face of out-of-pocket payments for related consumables by clients.

Unanswered questions and future research

Some grey areas which may require further elucidation include the poor attitude of clients to FP, provider bias for long-acting contraceptive methods and the poor buy-in for natural FP methods. We also need to know what can be done to attract more health workers to the OF centres and what will be the impact of the proposed additional workload on these health workers if having to provide integrated reproductive health services. Lastly why do health workers forget to mention the management of infertility as a component of FP service during their interaction with clients despite its inclusion in the service protocol [27].

There is the need to establish the knowledge of the health workers on post-operative FP, their counselling skill and the regular availability of the FP commodities in the hospital.

Conclusion

The prevalence of FP utilization amongst OF clients has been on the decline most especially in Sokoto. This can be reversed through an integrated approach to reproductive health service provision and monitoring with an improved training package which will contribute to the overall CPR targets of the States and also ensure no woman is left behind by 2030.

Limitations

The study was limited by the poor data storage in the centres, difficulty in tracing OF clients after discharge and unwillingness of health workers to work in OF units. All these contributed to the small sample size of the study. The initial study sites were three, but one OF unit was dropped because of poor recording of clients...
information which could not clearly distinguish between OF clients and the regular FP clinic clients. Also registers in the units did not capture a traceable contact address for discharged clients which limits the clients KII to those still residing in the units or came for follow-up during the study period. Other limitations are the inability to accurately recall past events during the KIIs and inadequate fund to include other OF units in the Country.

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