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CLINICAL PRESENTATION OF INFERTILITY IN MKAR-GBOKO, NORTH-CENTRAL NIGERIA

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ABSTRACT

Infertility is a worldwide health concern with dissimilarities in mode of presentation among couples. It is the commonest reason for gynaecological consultation in central Nigeria. Therefore there is need to appraise the clinical presentation of infertility and describe the manner of presentation by women in the region. Aim: To identify the mode of presentation and pattern of presenting complaints by women with infertility at a rural gynaecological outreach clinic. Method: A descriptive retrospective study at NKST Hospital Mkar-Gboko, north-central, Nigeria. Clinic records of patients who attended the outreach gynaecological clinic over eight years (1st January 2005 to 31st July 2013) were analysed using descriptive statistics with Excel 2010. Results: Of the 1,926 women studied, 1030 (53.5%) complained of inability to conceive, and 941 (92.0%) folders met inclusion criteria. Women with primary and secondary infertility were 264(28.1%) and 677(71.9%) respectively. The mean (±SD) age, parity and duration of infertility of the women were 31.5±5.9 year, 0.8±1.2, and 7 ±5 years respectively. The predominant complaints were inability to conceive, lower abdominal pain, abnormal menstruation, lower abdominal swelling and vaginal discharge. Majority of the women (55.0%) skipped inability to conceive as their chief complaint. In past surgical history, 194 (20.6%) of the women had 234 abdominal surgeries. On physical examination 538 (57.2%) of the women had no remarkable findings. Abdominal scar (n=194, 47.0%), enlargement of the uterus (n=166, 40.0%), vaginal discharge (n=42, 10.0%) were common findings. Conclusion: Non acute lower abdominal pain is a common mode of presentation of infertility in this population. The duration of marriage/age of last childbirth against the number of living children and contraceptive usage can be a clue to the woman's desire.

Keywords: Infertility, Clinical presentation, Abdominal pain, Central Nigeria.

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Contribution/ Originality

This study documents that non acute lower abdominal pain is a common mode of presentation of infertility by women in central Nigeria. The duration of marriage/age of last childbirth against the number of living children and contraceptive usage can be a clue to the woman's desire and appropriate intervention.

1. INTRODUCTION

Infertility is a worldwide health concern [1] in the developing world, affecting 8 – 15% of couples in their reproductive age [2, 3]. It is the most common reason for gynaecological consultation in central Nigeria [4]. Though infertility by itself does not threaten physical health, it has a strong impact on the psychological and social

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well-being of couples [5, 6] resulting in varying mode of presentation by the couple affected. Proper diagnosis is critical for good outcome. The diagnosis of infertility depends on clinical presentation and results of investigations. The many advances in gynaecology have made evaluative techniques vast, sophisticated and expensive, and often out of the reach of most clinicians in resource – poor settings where the problem is most prevalent. Often all that may be available to the Gynaecologist will be his/her clinical skills and a few additional investigations. Thus the need for careful attention to the manner in which the patients present. The universality of infertility notwithstanding, the manner of clinical presentation varies from one place to another, depending on the socio-economic and cultural setting from which the patients come [2, 6, 7]. This often causes misdiagnosis and inappropriate intervention at the expense of a focused care. There is the need to evaluate the clinical presentation of infertility in this part of the world to describe the manner of presentation by the patients with infertility in order to provide appropriate clinical and psychological care when they presents.

Aim: To identify the mode of presentation, pattern of presenting complaints and the common clinical features among infertile women at a rural gynaecological outreach clinic.

1.1. Subject and Method

This is a descriptive retrospective study of the mode of presentation and pattern of presenting complaint of women with infertility who attended the outreach gynaecological clinic at Nongo u Krestu u i Ser sha Tar (NKST) Hospital Mkar-Gboko, Benue State, north-central, Nigeria, over eight years (1st January 2005 to 31st July 2013). The clinic records of patients were retrieved and the data analysed using descriptive statistics with Excel 2010. The women came with intention to seek intervention for inability to conceive over time. The majority of the patients came by self-referral. The ethical committee of Jos University Teaching Hospital (JUTH) approved the study.

2. RESULTS

Women with complaint of inability to conceive were 1030 (53.5%) out of 1,926 women seen during the period under review. The number of folders with complete information was 941 representing 92.0% of the infertile women. Women with primary infertility were 264(28.1%) while 677(71.9%) women had secondary infertility. The age range was 17 to 55 years, with a mean value of 31.5±5.9. The mean parity was 0.8±1.2 and ranged between 0 – 8 children. Most of the women (n=847, 90%) were of low parity and majority of them (n=781, 83%) had one or no child. Of the women with previous deliveries (n=439, 46.7%) 15.0% had no living child. The mean duration of the infertility was 7 years±5 years with a range of 3 months to 40 years. The majority of the women (53%) presenting reported attempting conception between 3 to 8 years, see Table 1. The predominant complaints in the women beside inability to conceive were lower abdominal pain, abnormal menstruation, lower abdominal swelling and vaginal discharge. Over half of the women (55.0%) did not mention inability to conceive as their chief complaint. Inability to conceive was a primary, secondary or other complaint in 424 (45.1%), 339 (36%) and 178 (18.9%) of women respectively. They volunteered infertility as reason for their consultation only after probing into their complaints. In review of previous treatment, 194 (20.6%) of the women had 234 abdominal surgeries, among them 19.6% had the surgeries more than once. Myomectomy, appendectomy, surgery for ectopic pregnancy and unspecified laparotomy were the leading (68%) reasons for the surgeries, see Table 3. The majority of the women 538 (57.2%) had no remarkable findings on physical examination, see Table 4. Amongst those with demonstrable signs, the common findings were abdominal scar (n=194, 47.0%), enlargement of the uterus (n=166, 40.0%), vaginal discharge (n=42, 10.0%), pelvic tenderness, high blood pressure, galactorrhoea and obesity (n=28, 28, 26, 26; 5.0% each). Others findings in 2.5% constituted the remaining main physical findings.

3. DISCUSSION

The study showed that infertility is a common problem in central Nigeria and most of the women do not readily volunteer the complaint at presentation even when their reason for consultation is inability to achieve pregnancy over time. Lower abdominal pain, abnormal menstruation, lower abdominal swelling and vaginal discharge were the main complaints the women presented at consultation with the gynaecologist at NKST hospital Mkar. Interestingly, less than 50% of the women with desire to conceive gave failure to conceive as a primary reason of their visit.

Secondary infertility was the most common type of infertility in the study population. The type of infertility and age distribution among the women that attended the outreach clinic represented full spectrum of patients with infertility, from teen to middle age and were similar to that observed by other studies [7-10]. This shows the desire for pregnancy was expressed across all the age groups and reflects the high premium placed on fertility in the region. The majority of the women were ages 26 – 35 years. However 2.0 % of the patients were teenage girls, much lower than what was observed in Gombe, north eastern Nigeria [2] where 5.6% of the study population were age less than 20 years. This is at variance with the findings in Eastern Nigeria [11] where none of their subjects were below the age of 20 years. The difference shows the regional diversity of the age at marriage and desire for childbearing among the younger population in Northern Nigeria [2, 6, 7, 12]. The wide range of parity (0 – 8 deliveries) among the women studied notwithstanding, the average fertility (0.8 deliveries) of the women was very low compared to the north central zone total fertility rate of 5.4 [12]. This was similar to the finding in Gombe, north eastern Nigeria [2].

Though some of the women (2%) presented earlier (less than one year of not achieving pregnancy, some as early as 3 months of marriage) than the definition of infertility allows, late presentation was common among the women. Most of the women (65%) lived with the infertility for five years and above. This was similar to findings in many studies in Nigeria [2, 6, 7, 9]. Most couples normally get worried after one year of inability to conceive and start seeking intervention [2, 6]. The 2% of women who presented with infertility of less than 1 year duration reflect the societal pressure felt in a society which puts a premium on childbearing after marriage [6]. The late presentation means the patients' ages are advanced by the time they present as seen in this study. Although some married at a young age, about 25% were in their late thirties and older. Thus, they are dealing with declining reproductive potential [13] risk of marital disharmony [6, 14] and the appearance of chronic medical conditions. About 5% of the women were hypertensive. Therefore, it is important to understand the mode of presentation of infertility among women and deal with the issue before family dysfunction results.

The presenting complaints by the women were ranked primary, secondary and tertiary according to the woman's rating of import of her visit. Less than 50% of the women volunteered inability to conceive as their primary reason to visit the clinic. They rather complained of lower abdominal pain, abnormal menstruation, lower abdominal swelling and other symptomologies. Non presentation of failure to conceive as a primary complaint by women is a common feature in our clinics [1, 4, 8]. Primary complaints like headache, sleeplessness, backache etc. have been reported in many studies across this country [1, 2, 4, 7, 9] depending on cultural inclinations. These delusive presentations of infertility have the potential of misdirecting the weary clinician towards wrong diagnosis and inappropriate intervention. For examples, 21% of the women had abdominal surgeries with myomectomy, appendectomy, ectopic pregnancy and unspecified laparotomy as the leading (68%) reasons for the surgeries. Some of the women (19.6%) who had operations had more than one performed. Most of these surgeries might have been done in an effort to resolve the women's complaint of abdominal pain. These operative interventions can pose a significant risk to women with infertility. The same premise may explain why some women are treated for "chronic" pelvic inflammatory diseases or psychiatric disorders, ignoring their concerns about infertility [2, 4, 7, 9]. A thorough history, physical examination and astute attention to the manner the patients present can guide one to appropriate probing question that may reveal the woman's reason for the visit. Attention to cultural inclination,

year of last childbirth or marriage and whether or not there is current contraceptive use can give clue to fertility desires.

4. CONCLUSION

Non acute lower abdominal pain is a common mode of presentation of infertility in this population. Perceptive history taking and physical examination can help in revealing infertility as the intention of the woman's visits to the physician. The duration of marriage/age of last childbirth against the number of living children and contraceptive usage can be a clue. General Duty Doctors and Gynaecologist practicing in these climes must therefore keep in mind that inability to achieve pregnancy commonly belies complaints giving by women in the clinic. Understanding of this manner of presentation for infertility can prevent inappropriate interventions that can be detrimental to the woman quest for procreation.

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Table-1. Distribution of the socio-demographic characteristic and duration of infertility of women seen at the gynaecology clinic of NKST hospital Mkar-Gboko (n=941)

AGE (years)	Number	(%)
<=20	16	(2)
21 - 25	133	(14)
26 - 30	314	(33)
31 - 35	252	(27)
36 - 40	170	(18)
41 - 45	43	(5)
46 - 50	9	(1)
51 - 55	4	(0)
Total	941	(100)

PARITY	Number	(%)
0	502	(53)
1	233	(25)
2	112	(12)
3	49	(5)
4	25	(3)
5	13	(1)
>=6	7	(1)
Total	941	(100)

Living Children

Variable	Number	(%)
0	567	(60)
1	220	(23)
2	85	(9)
3	48	(5)
4	13	(1)
5	6	(1)
>=6	2	(0)
Total	941	(100)

Duration of Infertility (Years)

Variable	Number	(%)
< 1	19	(2)
1,2	131	(14)
3 , 4	181	(19)
5, 6	183	(19)
7, 8	146	(15)
9 ,10	106	(11)
> 10	170	(18)
Not stated	12	(1)
Total	941	(100)

Range 3 months - 40 years Mean7 years Standard deviation 5 years

Table-2. Distribution of presenting complaint(s) among infertile women that attended the gynaecology clinic at NKST hospital Mkar (n=1879)

S/no	Complaint (s)	Primary	Secondary	Tertiary	Total	(%)
1	Wants to conceive	424	339	178	941	(100)
2	Lower abdominal pain	288	44	17	349	(37)
3	No menstruation	39	71	5	115	(12)
4	Irregular menstruation	55	19	14	88	(9)
5	Lower abdominal swelling	36	21	13	70	(7)
6	Vaginal discharge	22	25	21	68	(7)
7	Back pain	11	31	21	63	(7)
8	Heavy menstruation	29	23	9	61	(6)
9	Breast discharge	4	4	6	14	(1)
10	Headache	6	1	6	13	(1)
11	Scanty menstruation	6	4	3	13	(1)
12	Body heat	1	3	6	10	(1)
13	Pain at intercourse	2	1	5	8	(1)
14	Excessive hair growth	0	6	1	7	(1)
15	Swelling in vagina	5	1	1	7	(1)
16	Recurrent pregnancy loses	3	2	0	5	(1)
17	Weight gain	0	2	2	4	(0)
18	Bleeding at intercourse	1	2	1	4	(0)
19	Palpitation	1	2	1	4	(0)
20	Second opinion	0	1	3	4	(0)
21	Frequent urination	0	0	3	3	(0)
22	Poor sleep	1	2	0	3	(0)
23	Recurrent Child loses	2	0	0	2	(0)
24	Anal pain	1	0	1	2	(0)
25	Chest pain	2	0	0	2	(0)
26	Fever	0	2	0	2	(0)
27	Low libido	0	2	0	2	(0)
28	Lump in breast	1	1	0	2	(0)
29	Painful menstruation	1	1	0	2	(0)
30	Blood in stool and urine	0	1	0	1	(0)
31	Body rash	0	0	1	1	(0)
32	Cervical tear	0	1	0	1	(0)
33	Cough	0	1	0	1	(0)
34	Malodorous urine	0	1	0	1	(0)
35	Pain at urination	0	1	0	1	(0)
36	Pelvic swelling	0	1	0	1	(0)
37	Perineal pain	0	1	0	1	(0)
38	Upper abdominal pain	0	0	1	1	(0)
39	Told has lesion on cervix	0	1	0	1	(0)
40	Weakness in lower limb	0	1	0	1	(0)

Table-3. Distribution of types of previous surgeries among infertile women that attended the gynaecology clinic at NKST hospital Mkar (n=238)

Previous surgeries	N	(%)
Myomectomy	59	(25)
Appendectomy	45	(19)
Salpingectomy for Ectopic	27	(11)
Laparotomy	31	(13)
Caesarean Section	22	(9)
Tuboplasty	22	(9)
Ovarian cystectomy	15	(6)
Lap/Dye	10	(4)
Salpingectomy	7	(3)
Total	238	(100)

Table-4. Distribution of the main physical findings amongst the infertile women that attended gynaecology out-reach clinic at NKST hospital Mkar-Gboko (N=557)

Physical Findings	N	(%)
Abdominal Scar	194	(35)
Enlarged uterus	159	(29)
Vaginal discharge	40	(7)
Pelvic tenderness	28	(5)
High blood pressure	28	(5)
Galactorrhea	26	(5)
Obesity	26	(5)
Hirsutism	25	(4)
Genital prolapse	7	(1)
Pallor	6	(1)
Acne	4	(1)
Others	14	(2.5)
Total	557	(100)

Others include perineal laceration 2, no breast 1, inguinal swelling 2, cervical laceration 2, breast lump 1, genital warts 1, enlarged spleen 1, enlarged kidneys 1, rectal fistula 1, haemorrhoid 1, urethral diverticulum 1