

Clinical Presentation of Infertility in Gombe, North-Eastern Nigeria

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Abstract

Background: Infertility is the commonest problem in our gynaecological clinics. However, the manner of clinical presentation varies from one place to another, depending on the socio-economic and cultural environment from which the patients come. There is therefore a need to evaluate the clinical presentation of infertility in this part of the world to characterize the manner of presentation of the patients.

Objective: To identify the mode of presentation of infertility in two tertiary health care centres in Gombe.

Method: A descriptive study of the history and findings of physical examination of women complaining of inability to conceive was conducted.

Results: One hundred and ninety six infertile women had their history taken and were examined. The prevalence of primary and secondary infertility was 36.7% and 63.3% respectively. The mean (\pm SD) age, parity and duration of infertility among the women were 28.3 ± 6.0 years, 0.9 ± 1.3 and 7.5 ± 6.0 years respectively. History of dysmenorrhoea (68.9%), previous abortion (63.2%), previous treatment for infertility (62.8%), chronic pelvic pain (48.5%), poor coital exposure (44.9%), abnormal menstruation (44.4%) and previous pelvic inflammatory disease (43.9%) were common. Common physical findings were galactorrhoea and features of genital tract infection. As the duration of infertility increased, a significantly higher proportion of the women were likely to have sought for traditional medication to solve the problem.

Conclusion: Secondary infertility is the commonest type of infertility in this population. Women with a longer duration of infertility are likely to have tried traditional medication unsuccessfully.

Key Words: Infertility, Clinical Symptoms, Traditional Medication [Trop J Obstet Gynaecol, 2003, 20: 93-96]

Introduction

Infertility afflicts 8-12% of couples worldwide¹. It is by far the commonest presenting complaint among gynaecological patients in Nigeria^{2, 3}. The causes are so wide and the treatment options as varied. Hence, the arsenal of investigative tools used in diagnosing the definitive cause of the problem has become so large and sophisticated, but most patients in developing countries have little or no knowledge of these tools nor can they afford their cost. Clinicians in these parts of the world cannot therefore subscribe to the luxury of requesting for these investigations, although there is no shortage of such patients.

Invariably, taking a thorough history and conducting a full physical examination, along with a few ancillary investigative facilities may be all that will be available to such gynaecologists in the management of infertile couples. Often, the patients are unable to afford even the basic investigations that are available, yet they are as desirous of having their own children as their counterparts in more affluent societies. They are also more afflicted by the social consequences of childlessness, since a child is most often the greatest security a woman has in such societies. It thus becomes necessary to understand the mode of presentation of infertility in our society.

The objective of this study was to identify the symptoms and signs with which infertile couples present with in the gynaecological clinics of two tertiary health centres in Gombe, Northeastern Nigeria.

Subjects and Methods

This is a descriptive study of the history and physical findings found in women attending the gynaecological clinics at the Specialist Hospital, Gombe, and the Federal Medical Centre, Gombe, from January 1999 to June 2000. For the purpose of this study, all patients who complained of inability to conceive for a period of at least twelve months of trying to achieve a pregnancy were recruited into the study. The findings of a thorough history and full physical examination of each patient were documented and analysed on SPSS (version 9.0) and Epi Info (version 6.0) statistical packages. A *p*-value of less than 0.05 was considered significant.

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Results

One hundred and ninety six infertile women had their histories taken and were physically examined. Of these, 72 (36.7%) and 124 (63.3%) had primary and secondary infertility respectively.

Their ages, parity, number of living children and duration of infertility are shown on Table 1. They were aged 17-42 years with a mean (\pm SD) of 28.3 \pm 6.0 years, with 43.4% being in their fourth and fifth decades. The mean parity was 0.9 \pm 1.3 with a maximum of 7; 56.1% were nulliparous. The maximum number of living children was 4 with a mean of 1.3 \pm 1.3. However, 67.4% (58/86) of the parous patients had no living child while the patient with 7 previous deliveries had only two living children and these were from a previous marriage. The patient with 4 living children had no child from her index marriage.

Table 1

Socio-Demographic Characteristics and Duration of Infertility

Variables	Number (%) N = 196
Age	
<20	11 (5.6)
20 – 29	100 (51.0)
30 – 39	78 (39.8)
40 or more	7 (3.6)
Parity	
0	110 (56.1)
1	39 (19.9)
2	24 (12.2)
3	13 (6.6)
4	5 (2.6)
5 or more	5 (2.6)
Number of Living Children (For 86 Patients Only)	
0	58 (67.4)
1	17 (19.8)
2	7 (8.1)
3	3 (3.5)
4	1 (1.2)
Duration of Infertility	
1-5	88 (44.9)
6-10	66 (33.7)
11-15	17 (8.7)
16-20	17 (8.7)
21-25	6 (3.0)
26 or more	2 (1.0)

The mean duration of infertility was 7.5 \pm 6.0 years, with a range of 1 to 28 years. Late presentation was common, 55.1% presenting after 5 years.

Table 2

Clinical Symptoms in Infertility Patients

Variables	Number (%) N = 196
Chronic Pelvic Pain	95 (48.5)
Inadequate Coital Exposure	88 (44.9)
Galactorrhoea	58 (29.6)
Mittelschmerz	50 (25.5)
Persistent Headaches	31 (15.8)
Coital Timing	24 (12.2)
Hyperthyroid Features	15 (7.7)
Visual Symptoms	14 (7.1)
Hypothyroid Features	7 (3.6)

Table 2 shows the presenting features in the patients. In 95 (48.5%) of the patients, there was a history of chronic pelvic pain. The mean coital frequency per week was 2.8 with a range of <1-7 per week. Inadequate coital exposure (< twice per week) was found in 45%.

Table 3

Physical Signs in Demonstrated in the Patients

Variables	Number (%) N = 196
Galactorrhoea	112 (57.1)
2. Tender Adnexae	86 (43.9)
3. Vaginal Discharge	82 (41.8)
4. Cervical Excitation Tenderness	79 (40.3)
5. Uterine Enlargement	31 (15.8)
6. Abnormal Pubic Hair Pattern	7 (3.6)
7. Anaemia	7 (3.6)
8. Adnexal Mass	6 (3.1)
Poorly Developed Secondary Sexual Characteristics	6 (3.1)

Dysmenorrhoea was the commonest gynaecological symptom elicited on detailed questioning, occurring in 135 patients (68.9%). Some 128 (62.8%) of the patients had previously been evaluated for infertility elsewhere, while 115 (58.7%) had previously used traditional medication.

The commonest demonstrable physical finding was galactorrhoea, occurring in almost twice as many patients as made the complaint. Features of genital tract infection such as adnexal tenderness, vaginal discharge and reflex cervical excitation tenderness were also common (Table 3).

As the duration of infertility rose, there was a statistically significant tendency to have sought for traditional medication ($\chi^2 = 12.01, p = 0.0005$). The association between a history of abnormal breast secretions and demonstrable galactorrhoea was also statistically significant ($\chi^2 = 14.9, p = 0.0002$).

Discussion

In a society where infertility is so common as to account for 60-70% of all gynaecological consultations^{2, 3}, investigative facilities are either limited, rudimentary or unaffordable. Hence, clinical evaluation of patients assumes an unprecedented value in patient management. In many Western societies, primary infertility accounts for 67-71% of cases while secondary infertility is seen in 29-33% of patients^{4, 5}. The reverse was observed in this study, with secondary infertility being predominant, a pattern observed in other sub-Saharan African studies¹. This may be due to the sequelae of poorly managed pelvic inflammatory disease, resulting in utero-tubal damage and/or pelvic adhesions. It is noteworthy that some segments of Western society also have high rates of secondary infertility. For instance, the prevalence of secondary and primary infertility was 14.0% and 3.1% respectively among American college alumnae⁶.

Late presentation of infertility was a common problem in the study population. This occurs in spite of the fact that many couples are worried enough to seek medical assistance within a year of beginning to pursue conception. Such delays in seeking assistance may be due to poor knowledge, unavailability and/or inaccessibility of appropriate services. Prior unsuccessful medical intervention elsewhere, which is often incomplete or inappropriate in nature, adds to the delay in instituting effective measures. Previous visits to traditional healers by many of the patients may be due to lack of confidence in orthodox medical intervention, since nearly three-quarters of them first sought orthodox medical treatment before opting for traditional medication.

Additionally, such late presentation means the patients' ages are often advanced by the time they present. Although some got married before they attained menarche, nearly half were in their fourth and fifth decades, when their reproductive potentials would have started declining, before coming to the hospital. It has been shown clearly that fertility

decreases with age, especially beyond the age of 35 years^{7, 8}. Bearing in mind that marital harmony may hinge on ability to reproduce⁹, it is important to deal with the issue before family dysfunction results. A coital frequency of thrice or more weekly is required to effectively cover the periovulatory period without resorting to timing of coitus. However, this may be supplemented by coital timing around the periovulatory period if coital frequency is by necessity of lower frequency as occur in those living apart or in polygamous families. There was a high prevalence of inadequate coitus with low rates of coital timing in these patients. In fact, there were cases of coital frequency less than once in three months without coital timing, either due to poor libido in either couple or couples living apart or both. Abnormal breast secretions were common and significantly associated with demonstrable galactorrhoea, which may have arisen due to hyperprolactinaemia and may result in anovulatory cycles. However, galactorrhoea is not always associated with hyperprolactinaemia, which in turn does not necessarily result in anovulatory cycles¹⁰.

Mittelschmerz occurred in many of the patients and may be used to approximate when ovulation could be expected to occur¹¹. It is a sharp midcycle lower abdominal pain of acute onset, probably caused by contractility of the perifollicular smooth muscle mediated through prostaglandin F₂. In addition, the menstrual history may be used to predict ovulation. A history of regular, cyclic and predictable menstruation indicates the presence of ovulation in approximately 98% of women¹² a fact that could be useful in counselling patients.

Pelvic inflammatory/sexually transmitted diseases are major risk factors associated with female infertility through tubal damage^{13, 14} and pelvic adhesions¹⁵. Elucidating a history suggestive of previous/recurrent/chronic PID is thus of paramount importance. Previous PID and its sequelae may also manifest clinically as chronic pelvic pain^{16, 17}. It may also give rise to uterine synechia, though this may result more commonly from over zealous uterine curettage. The presence of clinical signs of genital tract infection suggestive of ongoing pelvic inflammatory disease must be resolved before proceeding with further management. Infertility in this community presents in ways that are similar to what has been reported from other communities in this part of Africa.

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