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## APPRAISAL OF PERCEIVED PSYCHOSOCIAL IMPACTS AND COPING STYLES WITH ENDOMETRIOSIS AMONGST CHILDBEARING AGE WOMEN IN LAGOS NIGERIA

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**ABSTRACT:** *Endometriosis is a condition which occurs in females and is very difficult to deal with, both physically and emotionally. It is one of the most common gynaecological diseases that is associated with chronic pain, and psychosocial problems in terms of anxiety and stress, depression and self-esteem. Many women with endometriosis must cope with the aforementioned problems including infertility as well as the disease itself. This study aims to explore the perceived psychosocial problems associated with endometriosis and the coping styles adopted among childbearing age women in Nigeria. Methodology: The study adopted a non-experimental descriptive cross-sectional design in selecting eighty respondents simple randomly. A self-developed semi-structured questionnaire was used to collect data that spanned three month and data collected were descriptively and inferentially analysed with version 23 SPSS. Result: The mean age of the respondents was  $32.30 \pm 5.68$ , age 26-34 and 34-42 form the largest number of respondents with 38.7% and 37.5% respectively. Others are age 18-26 with 18.8% and age 42-50 form the lowest percentage of respondents with 5.0%. Despite that 77.5% of the respondents have poor knowledge of the disease, more than two-thirds of them were adopted various coping styles to prevent psychosocial impacts of the ailment. Also, the study revealed that there is a significant relationship between the childbearing age women's knowledge of endometriosis and their coping style with a p-value < 0.05 and that there is a significant relationship between the childbearing age women's parity and coping with endometriosis with a p-value < 0.05. Conclusion: The study concludes that endometriosis is without psychosocial problems, but knowledge of the disease and the number of parity were determinant of coping styles adopted.*

**KEYWORDS:** endometriosis, psychosocial, coping styles

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### INTRODUCTION

The desire to bear children is almost a universal one in Nigeria and most parts of sub-Sahara Africa and certain conditions such as endometriosis can hamper such desires as it brings untold pressure not only to the childbearing aged women who are affected but also to their families. Barrenness has varied consequences through its effects on community, societies and on the lifestyles and life chances of individuals. Even though the condition can affect women who have had children, it can adversely affect the women and their partners' general psychological well-being, relationship adjustments and overall quality of life. The diagnosis and experience with the disease can involve a number of spheres in a woman's life, such as physical, emotional, marital, sexual, professional and psychological (Jensen & Turk, 2014; Friggi et al., 2012). This is because the unfruitfulness resulted to many problems, ranging from psychological, physical and/or emotional to social problems, such as broken homes, depression, marital conflicts; psychological problem which surface as a result of inability to bear children, both sexes may feel inadequate to their roles, having mental illness (Obiyo, 2016)

Endometriosis is one of the most common gynaecological diseases and is defined as a benign and proliferative chronic disorder characterized by the ectopic presence and growth of functional endometrial tissue, glands and stroma, outside the uterine cavity (Greene, Lang, Kendzioriski, Sroga-Rios, Herzog & Burns, 2016). Similarly to the ectopic pregnancy, the ectopic endometrial tissue is under the influence of hormones, proliferates changes in histological characteristics undergoes degeneration and then shedding, just like in the case of menstruation. During these processes, it might cause severe destruction of the surrounding tissues and organs (Nnoaham et al, 2011) and severe associated pelvic pain (Aerts, Grangier, Streuli, Dällenbach, Marci, Wenger & Pluchino, 2018)

According to Serdar et al (2019), pelvic endometriosis is a complex syndrome characterized by an oestrogen-dependent chronic inflammatory process that affects primarily pelvic tissues, including the ovaries, resulting in worsening pain and other symptoms over time. It is caused when shed endometrial tissue travels retrograde into the lower abdominal cavity. Endometriosis affects an estimated 1 in 10 women during their reproductive years (usually between the ages of 15 to 49), which is approximately 176 million women worldwide. However, endometriosis can start as early as a girl's first period and the menopause may not resolve the symptoms of endometriosis, especially if the woman has scar tissue or adhesions from the disease and/or surgery. It can severely alter quality of life and leads to extensive problems with fertility and loss of work time (Adamson, Kennedy & Hummelshoj. 2010).

Endometriosis might remain asymptomatic and discovered accidentally. However, it may cause symptoms as painful menstruation (dysmenorrhea), painful intercourse (dyspareunia) , painful micturition (dysuria), painful defecation (dyschezia) , lower back or abdominal discomfort , chronic pelvic pain (non-cyclic abdominal and pelvic pain of at least 6 months" duration), cyclic rectal bleeding or haematuria (bowel or bladder invasion), and cyclic dyspnoea secondary to catamenial pneumothorax, susceptibility to development of adenocarcinoma and bleeding into the surrounding tissues, resulting in inflammation and formation of scarring and adhesions. It is peculiar, that symptom severity does not correlate well with the extent or progression of the lesions (Giudice, 2010; Parazzini, Vigano, Candiani & Fedele, 2013).

In Nigeria, women are diagnosed with endometriosis when the tissue that normally lines the inside of the uterus actually grows outside the uterus. When this happens, the ovaries (and possibly the fallopian tubes and tissue lining of the pelvis) are affected. In severe cases, although rare, endometrial tissue can even spread beyond pelvic organs. The condition normally presents in women in their late 20s to early 30s. About 30-40% of Nigerian women (who live in Nigeria) suffer from endometriosis and a study by Alabi, Zowa & Onwumere (2013) reported a 20% prevalence of the condition and claims that approximately 11% of women and girls in Nigeria unknowingly live with the disorder, even though they show no symptoms, with diagnosis only occurring years later.

Globally, 176 million around the world suffer from endometriosis – a condition which occurs in females and is very difficult to deal with, both physically and emotionally. It is estimated to affect 10% of women within their reproductive age and is believed to be a major cause of infertility among couples globally. Unfortunately, however, many people with the condition remain undiagnosed. It is characterized by late diagnosis as it takes an average of 10-12 years

for a woman living with endometriosis to get a diagnosis in Nigeria, due largely to poor awareness (Nwankudu, 2018), and poor state of healthcare delivery including reproductive health.

It impacts the social and economic participation, physiological, mental and psychosocial health of affected women. The disease can lead to debilitating long-term chronic pain, compromised fertility and sexual functions. A client, as experienced by the researcher, described the pain of having endometriosis to other women to imagine the worst period cramps they have ever had, multiply that extent of pain by five and imagine living with such a pain on an almost-daily basis. In some cases, gastrointestinal issues might come up, pain during intercourse, exceptionally heavy periods, extreme bloating, chronic fatigue and depression may also occur. The lack of information and solutions can be extremely depressing and anxiety-inducing. People with endometriosis will get 15, 20 surgeries and it causes all this scar tissue, which makes it even harder to get pregnant.

Traditional thinking was that endometriosis was a condition of white women but that conventional thinking is rapidly changing. Unfortunately, however, when black women have chronic pelvic pain, it is presumed to be due to other conditions like pelvic inflammatory disease or uterine fibroid tumours. However, endometriosis is real and common in many black women (Endometriosis Support Group, 2018). Few studies have looked into the prevalence and effects of surgeries as related to endometriosis. Others review impacts of the disease, especially the changes in the quality of life brought about by the operation. The present study aims to explore the psychosocial effects of the endometriosis and coping styles adopted by the childbearing women suffering from endometriosis.

## **MATERIAL AND METHODS**

This is a facility-based study which adopted a non-experimental descriptive cross sectional design to appraise the perceived psychosocial effects and coping styles of childbearing women with endometriosis attending Medison Hospital, Lekki, Etiosa Local Government Area of Lagos State. The sample size of 80 respondents were randomly selected based on their information on the hospital record sheet. Sample size was determined using Cochran formula. Collection of data was done over 5 visits within the period of three months, with machinery put in place to avoid re-selection of respondents on subsequent visits. The inclusion criteria were set on the bases that all participating respondents should be  $\geq 18$  years and  $\leq 50$  years of age, the individual must not have any comorbid gynaecological issues that might mimics endometriosis and the diagnosis of endometriosis must be made 3 months before the commencement of the study. Self-developed structured questionnaire consisting of close-ended questions were used to elicit information from selected respondents for the study. The questionnaire was divided into five (5) sections based on research questions and study objectives namely:

Section A comprises of the socio-demographic data of the respondents.

Section B: Questions on the knowledge of the respondents towards endometriosis

Section C: Questions on the perception of the respondents towards endometriosis

Section D: Consists of questions on the effects of endometriosis on the respondents

Section E: Consists of questions on the respondents' coping styles.

**Psychometric Properties of Research Instrument:** To ensure the validity of the research instrument, the questionnaire was developed using study objectives and as well as literature reviewed to ensure its content validity. Instrument used by other researchers on related studies was also consulted. Face validity was ensured by examination of the instrument by the co-authors after subjecting it to peer review and consultation with research expert for possible adaptation. Necessary corrections were made to rule out ambiguity and bias. A test-retest method was used to ensure reliability of the instrument. A Pearson's product correlation coefficient analysis was done on the two sets of questionnaire to statistically determine the reliability. A reliability estimate of Cronbach alpha 0.88 indicated that the instrument was reliable.

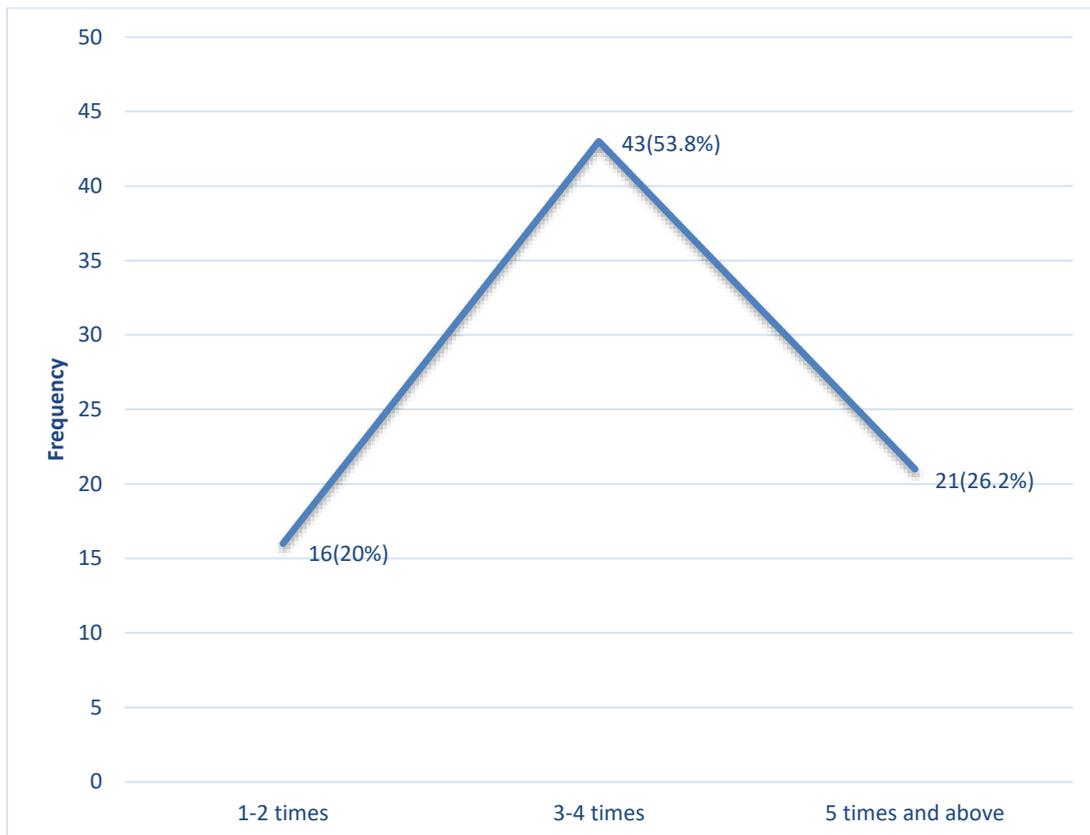
Relevant information was gathered through self-administration of the questionnaires other researchers. The collection process was done within 5 visits. The waiting hall served as the venue for the collection of data which was retrieved immediately. A total of 16 questionnaires were distributed on each visit. A total of 80 questionnaires were distributed and retrieved for analysis. Data collected was analysed electronically with a software version 23 of Statistical Package for Social Sciences (SPSS) using descriptive and inferential statistics and presentation of data were done using frequency tables and charts for categorical variables.

## RESULT

**Table 1: Respondents' demographic characteristics**

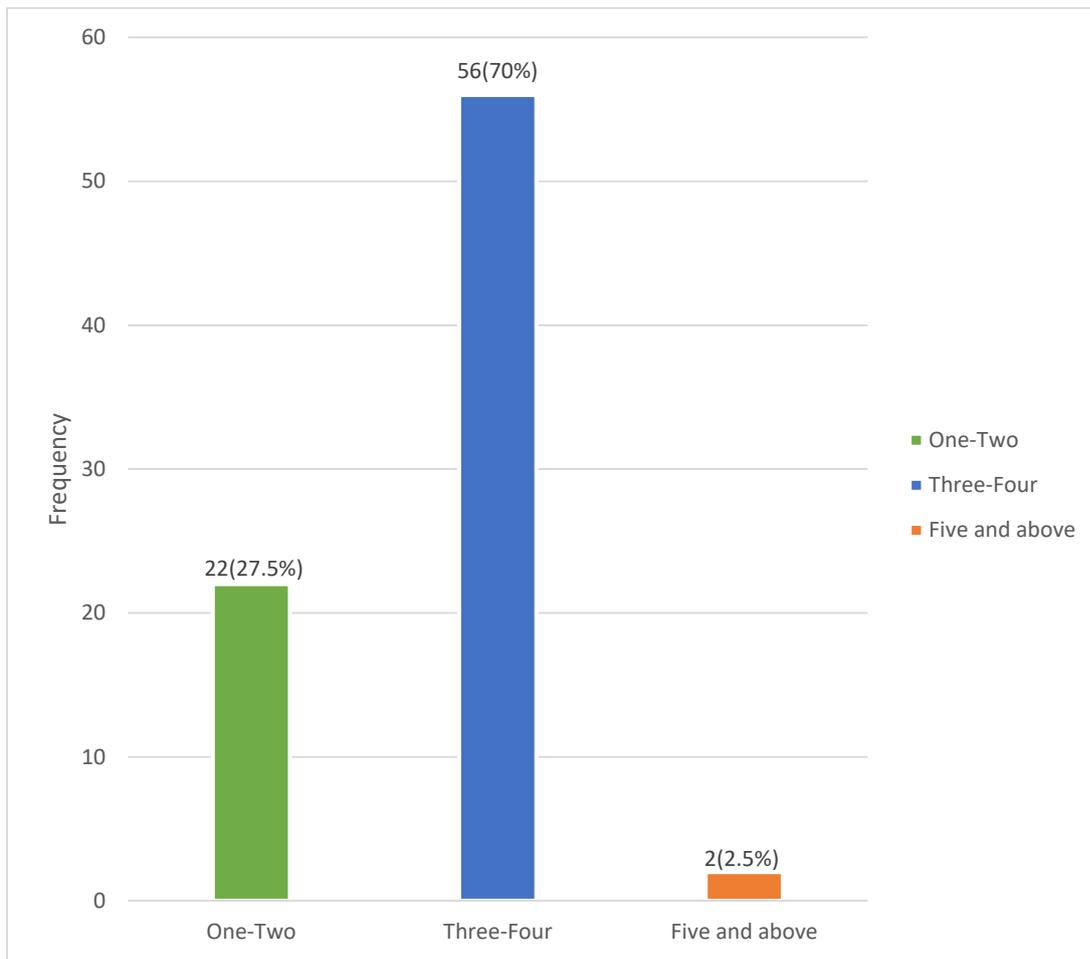
Demographic Characteristics	Frequency	Percentage (%)
<b>Age (Years)</b>		
18-26	15	18.8
26-34	31	38.7
34-42	30	37.5
42-50	4	5.0
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Mean Age</b>		<b>32.30 ± 5.68</b>
<b>Marital Status</b>		
Single	7	8.7
Married	67	83.8
Divorced/Widowed	6	7.5
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Religion</b>		
Christianity	59	73.8
Islam	21	26.2
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Ethnicity</b>		
Hausa	10	12.5
Igbo	28	35.0
Yoruba	35	43.8
Others (Urhobo and Isoko)	7	7.7
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Educational Qualification</b>		
Secondary	18	22.5
Tertiary	62	77.5
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Occupation</b>		
Civil servant	25	31.2
Unemployed/Housewife	5	6.2
Self employed	33	41.3
Others	17	21.3
<b>Total</b>	<b>125</b>	<b>100.0</b>

The mean age of the respondents was  $32.30 \pm 5.68$ , age 26-34 and 34-42 form the largest number of respondents with 38.7% and 37.5% respectively. Others are age 18-26 with 18.8% and age 42-50 form the lowest percentage of respondents with 5.0%. Majority (83.8%) are married with about three-quarters (73.8%) practicing Christians. The participants are learned population with 77.5% having tertiary educational qualification and 22.5% with secondary education qualification. About half (41.3%) are self-employed while 31.2% are civil servants. The study population is predominantly Yorubas (43.8%) with 35% Igbos and 12.5% Hausas.



**Figure 1: Number of pregnancy distribution of respondents before and after marriage (= 80)**

The figure above revealed that more than half (53.8%) of the study population are G<sub>4</sub>P<sub>3</sub> (gravida 4 para 3) while more than a quarter (26.2%) are multipara and 20% are primigravida and G<sub>2</sub>P<sub>1</sub> (gravida 2 para 1).



**Figure 2: Parity distribution of respondents (n = 80)**

The figure above revealed that majority (70%) of the respondents had parity 3 while 27.5% had parity 1-2 and only 2.5% had parity >5.

**Table 2: Respondents' knowledge of endometriosis**

Knowledge	Frequency	Percentage (%)
<b>Understanding of Endometriosis</b>		
When tissues seen inside the womb grow outside the womb	10	12.5
When menstruation stops	15	18.8
When bleeding occurs from the vagina	12	15.0
I don't know	43	53.7
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Criterion not necessary for it to be suspected</b>		
Lower abdominal pain	29	36.2
Dizziness	10	12.5
Painful sexual intercourse	23	28.8
Infertility	18	22.5
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Impact of endometriosis on quality of life and work</b>		
Impacts	34	42.5
Does not impact	20	25.0
I don't know	26	32.5
<b>Total</b>	<b>80</b>	<b>100.0</b>
<b>Early diagnosis and treatment can reduce emotional suffering and long-term complications</b>		
Reduces	22	27.5
Does not reduce	14	17.5
I don't know	44	55.0
<b>Total</b>	<b>80</b>	<b>100.0</b>

From the table above, only about (12.5%) of the study population had a good understanding of endometriosis to occur when tissues seen inside the womb grow outside the womb and that feeling of dizziness is not necessary a criterion for endometriosis to be suspected. About (36.2% and 28.8%) of them affirmed that with the presence of lower abdominal pain and painful sexual intercourse, endometriosis is not necessary suspected. Only 22.5% stated that with infertility, the suspect of endometriosis becomes unnecessary. About half (42.5%) of the women affirmed that endometriosis impacts on their quality of life and work with more than a quarter (27.5%) believing that early diagnosis and treatment can reduce emotional suffering and long-term complications.

**Table 3: Respondents' distribution of psychosocial impacts of endometriosis on women (n = 80)**

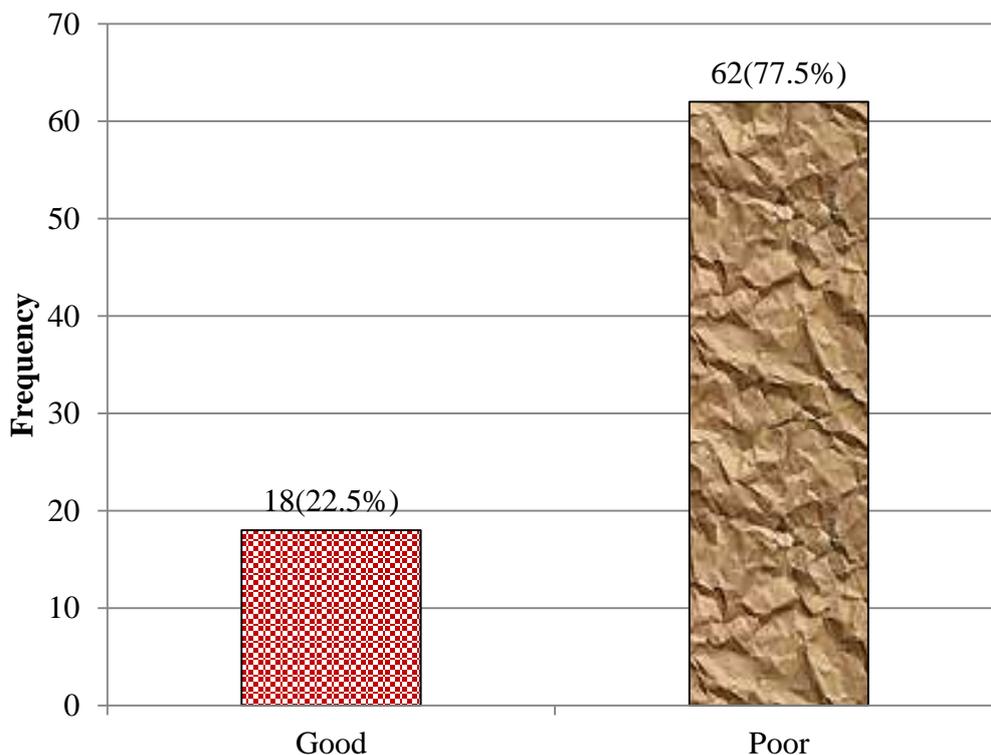
Variables	Agreed	Disagreed
The condition can limit my normal daily physical activity, like walking and exercise	50 (62.5%)	30 (37.5%)
It impacts on self confidence	67 (83.7%)	13 (16.3%)
It can lead to general feelings of being tired and fatigued	26 (32.5%)	54 (67.5%)
The reduction of daily activities makes me to gain excessive weight	42 (52.5%)	38 (47.5%)
It causes a parlour look due to heavy bleeding and anaemia	44 (55.0%)	36 (45.0%)
It is a burden	54 (67.5%)	26 (32.5%)
It interferes with sexual activities	42 (52.5%)	38 (47.5%)
It leads to depression	51 (63.7%)	29 (36.3%)
It is overwhelming and brings about worry as the condition can cause infertility	38 (47.5%)	42 (52.5%)

The table 3 shows the different psychosocial effects of endometriosis on the women. Majority (83.7%) of the respondents affirmed that endometriosis impacted on their self-confidence and as such, as high as (67.5%) of the respondents claimed it was burdensome to them, 63.7% developing depression while 62.5% claimed that the condition limited their normal daily physical activities, like walking and exercise. Also in the table, more than half (55%) of the participants stated that it made them have a parlour look due to heavy bleeding that resulted to anaemia in most cases. About half (52.5%) concluded that the condition brought about the reduction of their daily activities thereby making them gain more weight and interferes with their sexual activities too.. Only 47.5% believed that the condition completely overwhelmed them and brought about negative thoughts of being infertile as a result of the condition.

**Table 4: Possible coping styles employed by the women to cope with endometriosis (n = 80)**

Items	Always	Most of the time	Sometimes
Feeling of independence of the circumstances the condition poses	13 (16.3%)	28 (35.0%)	39 (48.7%)
Believing that the condition is not a threat	32 (40.0%)	16 (20.0%)	32 (40.0%)
Acquisition of more information on the condition	28 (35.0%)	15 (18.7%)	37 (46.3%)
Crying	33 (41.3%)	24 (30.0%)	23 (28.7%)
Taking action to change the situation	30 (37.5%)	27 (33.8%)	23 (28.7%)
Reminding oneself about the good things about oneself	42 (52.5%)	16 (20.0%)	22 (27.5%)
Believing that time will sort things out	36 (45.0%)	21 (26.2%)	23 (28.7%)
Daydreaming about things getting better in future	21 (26.2%)	34 (42.5%)	25 (31.3%)

Table 4 shows that nearly half (48.7%) of the respondent had a feeling of independence of the circumstances the condition possess and had acquisition of more information on the condition (46.3%). Also almost half of the study population (40%) believed that the condition was not a threat while only 31.3% were daydreaming about things getting better in future. 28.7% of the respondents cried and equally believed that time will sort things out. Only 27.5% reminded themselves about the good things about themselves.



This figure shows that nearly a quarter (22.5%) of the respondents exhibited good knowledge of endometriosis while more than three-quarters (77.5%) of them exhibited inadequacies in their knowledge of endometriosis.

**Table 5: Showing the relationship between knowledge of endometriosis and coping style**

	Seeing the condition not as a threat					
Knowledge Level	Sometimes	Most of the time	Always	Total	x <sup>2</sup>	(p-value)
Poor	14(22.6%)	16(25.8%)	32(51.6%)	62(100%)	38.83	.000
Good	18(100.0%)	0(0.0%)	0(0.0%)	18(100%)		
<b>Total</b>	<b>32</b>	<b>16</b>	<b>32</b>	<b>80</b>		

The table above shows significant relationship between the childbearing age women's knowledge of endometriosis and their coping style with a p-value < 0.05. Therefore, the null hypothesis was rejected and the alternative accepted.

**Table 6: Showing the relationship between women's parity and coping style**

	Seeing the condition not as a threat					
Parity	Sometimes	Most of the time	Always	Total	x <sup>2</sup>	(p-value)
1-2	22(100.0%)	0(0.0%)	0(0.0%)	22(100%)	47.50	.000
3-4	10(17.8%)	16(28.6%)	30(53.6%)	56(100%)		
5 and above	0(0.0%)	0(0.0%)	2(100.0%)	2(100%)		
<b>Total</b>	<b>32</b>	<b>16</b>	<b>32</b>	<b>80</b>		

The table above shows significant relationship between the childbearing age women's parity and their coping with endometriosis with a p-value < 0.05. Therefore, the null hypothesis was rejected and the alternative accepted.

## DISCUSSION

The socio-demographic characteristics of the study population showed that a young population with mean age of  $32.30 \pm 5.68$  years (SD), which is in accordance with experts agreement that women who are of reproductive age, roughly ages 25-40, are the most commonly affected by endometriosis (Schrager, Falleroni & Edgoose, 2018). age 26-34 and 34-42 form the largest number of respondents with 38.7% and 37.5% respectively. This was in tandem with the prevalence study conducted among German population that the highest prevalence rate of endometriosis was observed to be aged 35-44 years (Abbas, Ihle, Koster & Schubert, 2012). Others are age 18-26 with 18.8% and age 42-50 form the lowest percentage of respondents with 5.0%. Majority (83.8%) are married with about three-quarters (73.8%) practicing Christians. The participants are learned population with 77.5% having tertiary educational qualification and 22.5% with secondary education qualification. About half (41.3%) are self-employed while 31.2% are civil servants. The study population is predominantly Yorubas (43.8%).

The study revealed that majority of the respondents affirmed that endometriosis impacts on their self-confidence, this was posited that a negative effect on self-esteem, self-confidence and lack of control of their life (powerlessness) were other reported psychological impacts of endometriosis in literature (Moradi, Parker, Sneddon, Lopez & Ellwood, 2014). The reasons why some women reported negative impacts on self-confidence because of, not being able to have a child or have more children, not able to have normal sex due to dyspareunia, being unsatisfied about body appearance because of weight gain or lots of scars (Moradi, et al, 2014). Two third agreeing that it is burdensome because it required conservative treatment which will not totally stop the progressive nature of the disease but contributing to frequent hospital visit (Agarwal, Soliman, Bond & Epstein, 2019). Generally, from the qualitative study conducted by Moradi, et al (2014) the women reported that they experienced recurrent negative psychological and emotional impacts of endometriosis. As high as (63.7%) of them also claimed that it leads to depression and 62.5% that attributed it to limiting normal daily activity example walking/other forms of exercises. As this disease condition not different from other chronic conditions that have adverse effects on activities of daily living, endometriosis has negative effects on work life and hindered many women in the performance of their professional duties (Sperschneider, Hengartner, Kohl-Schwartz, et al, 2019), including reduced performance of activities of daily living. More than half of the participants agreeing that endometriosis cause parlour look due to heavy bleeding, interferes with sexual activity and reduces daily activities leading to weight gain. This coincides with studies of Nnoaham et al (2011); Sepulcri & Amaral (2009); Lorencatto et al (2014); Huntington & Gilmour (2015). Most health conditions can be made worse by the mental, emotional or psychological response to them. A good disposition towards a disease makes it easier to adapt or even respond to treatment.

The study showed that the major coping style which was agreed by half of the respondents was by always reminding oneself of the good thing about oneself. And thinking of good of oneself promote a big positive impact on mental and physical health, hence reduced anxiety that might have supposed to compounded the effects of the disease. Others believed that time will sort things out (45%), and also that the condition is not a threat (40%). Contrarily, Roomaney & Kagee (2016) reported that coping styles discovered in their study were limiting physical activities, increase knowledge about endometriosis, scheduling social and work activities around menstrual cycle, engaging in self-management and relying on social support. Others include accepting the disease, adopting a positive attitude, engaging in self-talk and evoking spirituality.

People who do not develop coping styles to tackle health challenges will end up with other health conditions coupled with mental problems. This will tend to impact negatively on their overall wellbeing leading to depression and this can equally drive one crazy or becoming suicidal.

From the first hypothesis, the poor knowledge of endometriosis shown by the childbearing age women, possibly could have made more than half of them not to see the condition as a threat all the time, a quarter most of the times saw it as a threat while 22.6% only see it as a threat sometimes. Even among those who had good knowledge of endometriosis, all the respondents occasionally saw it as a stress. These show strong significant relationship between the childbearing age women/s knowledge of endometriosis and their coping style. It equally made

them to be able to cope with the severity of the condition. This agrees with Donnati et al (2017) study that reported that the patients with endometriosis who used positive coping strategies had better adaptation to stress.

With the second hypothesis stating no significant relationship between the childbearing age women's parity and their coping with endometriosis, all the women with 1-2 parity occasionally saw endometriosis as a threat, with women with 3-4 parity, only 17.8% of them saw it as not being a threat, 28.6% saw it as a threat most of the time while more than half (53.6%) always saw it as not being a threat. However, with women with parity 5 and above, all of them 2(100%) did not see it as a threat, thus, showing significant relationship between the childbearing age women's parity and their coping with endometriosis.

## CONCLUSION

In conclusion, it can be seen that endometriosis significantly affects women and societies world-wide, unfortunately in most nations including Nigeria, its awareness and knowledge is still poor. From the findings of this study, it can be concluded that there is significant relationship between mothers' knowledge on endometriosis, their coping style and their perception regarding endometriosis. As the women exhibited poor knowledge, their perception regarding endometriosis was fair. In addition, this study has indicated that endometriosis was a serious burden to the women, leading to depression and their normal daily physical activities were affected too. It goes to show therefore that enhancing women's knowledge regarding the condition can drastically help in reducing the impact it poses on the overall wellbeing of the women. Therefore, since the women believe that reminding themselves about the good things about their lives can help them cope with the condition, making mandatory regular reproductive health screening for the women could be a way of introducing health education that could dwell on not only overview of endometriosis but also creating motivational talks for the women.

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