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Psychosocial consequences of secondary infertility among women of childbearing age in Ibeme community in Isiala Mbano local government area, Imo state

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Abstract

This study is on psychosocial consequences of secondary infertility among women of childbearing age in Ibeme Community in Isiala Mbano Local Government Area Imo State. The objectives of the study were to: ascertain the knowledge of secondary infertility among women towards secondary infertility and their age, determine the possible causes of secondary infertility, determine the psychosocial effects of secondary infertility and identify measures for preventing and controlling secondary infertility. Four research questions were formulated based on the research objectives. Relevant literatures to the study were reviewed. Total Person Model theory was adopted to support the study. A descriptive research design was adopted for the study. A pilot study was carried out and Pearson's product of co-relation co-efficient was used to calculate the reliability and a reliability index of 0.8 was obtained. A self structured questionnaire was used to collect data from 120 respondents and the results were analyzed using figures and tables. The result revealed that secondary infertility mostly affects women of older age with about 60% rate and it is also discovered that blocked fallopian tube was a major cause of secondary infertility with about 65% votes from the respondents. Another result revealed that secondary infertility causes psychological problems which include frustration, depression, and isolation with a vote of 62.5%.

Keywords: psychosocial consequences, secondary infertility, Ibeme Community.

Introduction

Most experts define infertility as not being able to get pregnant after at least one year of trying. Women who are able to get pregnant but then have recurrent miscarriage are also said to be infertile. The infertility definition made a difference. The World Health Organization definition based on 24 months of trying to get pregnant is recommended as the definition that is useful in clinical practice and research among different disciplines (WHO 2010).

Infertility is a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (WHO, 2018).

Infertility has a psychological effect on the couple because parenthood is one of the major transitions in adult life for both men and women. The stress of the non-fulfillment of a wish for a child has been associated with emotional squeal such as anger, depression, anxiety, marital problems and feeling of worthlessness. Partners may become more anxious to conceive, ironically increasing sexual dysfunction and social isolation. Marital discord often develops in infertile couples, especially when they are under pressure to make medical decisions. Couples experience stigma, sense of loss and diminished self-esteem in the setting of their infertility (Prasanta & Nachtigall, 2010).

Infertility may be primary or secondary. Primary infertility refers to infertility of women who have never conceived and secondary infertility refers to infertility of women who has conceived at least once before. The use of the ability of the female to conceive as a measure to differentiate between primary and secondary infertility is however problematic as it places couple infertility on the doorsteps of the female partners (Tabong & Adongo, 2013).

It is a growing problem and across virtually all cultures and societies almost all over the World and affects an estimated 10%-15% of couples of reproductive ages. In recent years, the number of couples seeking treatment for infertility has dramatically increased due to factors such as postponement of childbearing in women, development of newer and more successful techniques for infertility treatment, and increasing awareness of available services. This increasing participation in fertility treatment has raised awareness and inspired investigation into the psychological ramifications of infertility. Consideration has been given to the association between psychiatric illness and infertility. Researchers have also looked into the psychological impact of infertility per se and of the prolonged exposure to intrusive infertility treatments on mood and well-being. There is less information about effective psychiatric treatments for this population; however, there is some data to support the use of psychotherapeutic interventions.

The purpose of the study is to determine the psychosocial consequences of secondary infertility among women of childbearing age.

Research Methodology

Research design

The descriptive survey design was used to collect data in order to investigate the psychosocial consequences of secondary infertility among women of childbearing age in Ibeme community, Isiala Mbano Local Government Area.

Study area

The study was conducted in Ibeme community a town which comprises of four (4) villages namely: Umuogbohoro, Umuabuazu, Umuta and Umuokenawom.

Target Population

The target populations used in the study were women of reproductive age who were residents of Ibeme community at the time of this study. They include educated and non-educated, traders, civil servants, farmers and housewives. The target population from the four (4) villages is 300.

Sample size

Simple random technique: When the population is small, we study everybody in the population therefore my population size was 300 and I used 40% of the population.

Sampling technique

Simple random technique was applied to select 40% of the target population, which is a total of 300 women. Using Nwanna's formula, this stated that sample size is 40% for hundreds.

Therefore,

$$40/100 \text{ x target population} = \frac{40}{100} \text{ x} \frac{300}{1} / 1 = 120$$

Sample of 120 was selected.

Balloting with replacement was used where a ballot box was brought with paper written YES (120) and NO (180) and then the subject were asked to pick from the box. Those who picked YES were selected for the study.

Table 1: Shows the villages and number of women selected.

Ibeme	Population	Sample
Umuogbohoro	93	50
Umuabuazu	80	20
Umuta	50	15
Umuokenawom	77	35
Total	30	120

Instrument for data collection

The method of data collection was a structured questionnaire, which comprises of section A consisting of demographic data and Section B consisting of questions which were formed based on the research objectives.

Validity of instrument

Face and content validity was used to test the instrument. The questionnaire was given to some experts to go through it and finally the supervisor who made some corrections by adding some new questions and removing some, hence it validity.

Reliability of the instrument

A pilot study was used to determine the reliability of the instrument and a test-retest method was adopted. This entails that an instrument given to the same people in repeated times is expected to produce the same result.

Questionnaire was issued out to fourteen (14) women of childbearing age (15-45 years) who attended a seminar at Otoko and data was collected. After 2 weeks, another set of questionnaire of the same

questions was given to the same people. The Pearson product moment co-relation co-efficient reliability index was used to find out the reliability of the instrument and reliability index of 0.8 was obtained.

Method of Data collection

The questionnaire was distributed to women who attended the family planning unit in Ibeme health centre on a face to face at 2 weeks interval. It was explained to them and also ensured that it was properly filled and collected.

Method of Data Analysis

Data collection was analyzed using frequencies and percentage which was represented in tables and figures as shown in chapter four.

Results

Table 1: Respondent's Age Distribution

Age Group	N	(%)
15 – 26	35	29.17
26 - 35	64	53.33
36 - 45	21	17.5
Total	120	100

Source: Field Work, 2018

The result in table 1 shows the age distribution of the participants in the study. The result presents that the age group between 26 - 30 years (53.33%) were the highest participants in the study, followed by those aged 15 - 26 years (29.17%), then the least age group

that participated in the survey were 36 - 45 years of age(17.5%). This indicates that the participants studied were matured women studied. See figure 1 for a graphical representation of the result.

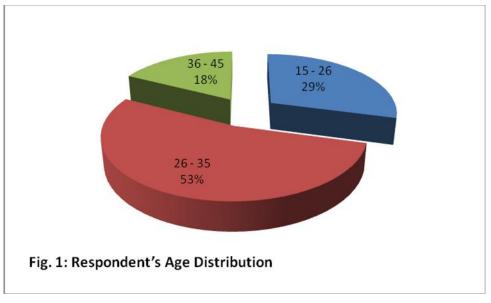


Table 2: Marital Status Distribution

Marital Status	N	(%)
Married	92	76.67
Single Divorced	19	15.83
Divorced	0	0
Widow	9	7.5
Total	120	100

The result in table 2 presents the marital status distribution of the participants. The study showed that there were more married women that participated in the study which constituted about 76.67% followed by

participants that are single (15.83%) and the least participants (7.5%) in the study were widowed. See a graphical illustration of this presentation in figure 2 below.

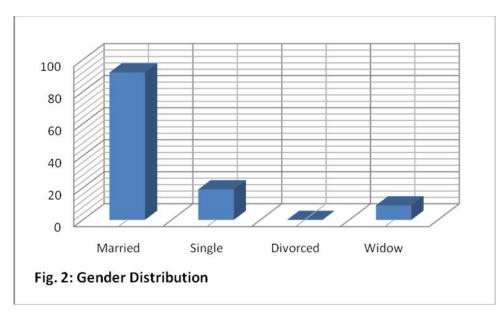


Table 3: Respondent's Parity

No. of child	N	(%)
0 - 1	32	26.67
2 - 4	67	55.83
5 - 8	21	17.5
Total	120	100

Source: Field Work, 2018

The result in table 3 presents the respondents' responses on parity which indicates the number of children they have. The result shows that majority of the respondents that participated in the study has within 2 - 4 children (55.83%), followed by about

26.67% that reported are having 0-1 child while 17.5% reported having 5-8 children. The chart in figure 3 presents a graphical representation of the result.

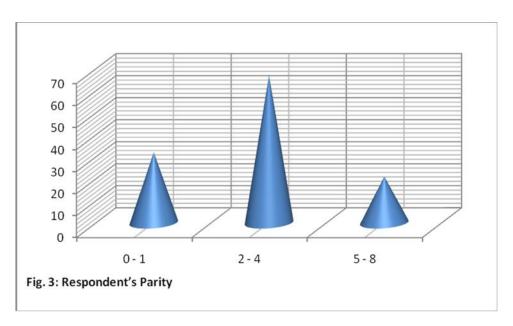


Table 4: Respondent's Religion Distribution

Religion	N	(%)
Christian	97	80.83
Islam	2	1.67
Pagans/Others	21	17.5
Total	120	100

The result in table 4 presents respondents' religion denomination. The result shows that there were more participants that are Christians (80.83%) that participated in the study followed by pagans/others

(17.5%) and the least participants indicated Islam (1.67%). See chart in figure 4 below for a graphical representation of the result.

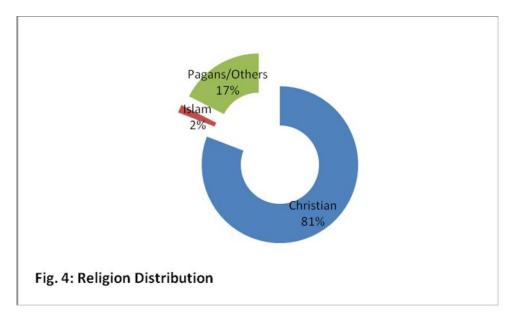


Table 5: Educational Attainment of Respondents

Educational Attainment	N	(%)
Primary	29	24.17
Secondary	56	46.67
Tertiary	32	26.67
None	3	2.5
Total	120	100

Table 5 presents the highest educational attainment of the respondents. The result showed that the participants were mostly respondents with secondary school certificates (46.67%), followed by respondents with tertiary school certificates (26.67%), then about

24.17% with primary degree while the least participants were those with no educational qualification (2.5%). See a graphical representation of the result in figure 5 below.

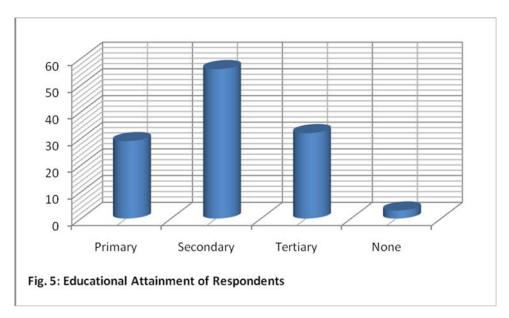


Table 6: Respondent's Occupation Distribution

Occupational Distribution	N	(%)
Farming	54	45
Teaching	12	10
Housewife	32	26.67
Business	72	60
Nurse/others	4	3.33
Total	120	100

Source: Field Work, 2018

Table 6 presents the occupational distribution of the respondents. The result showed that the participants were mostly into business (60%), followed by respondents into farming (45%), then about 26.67%

that were reported housewives while about 10% were teachers and the rest of the participants (3.33%) indicated nurses/others. See a graphical representation of the result in figure 6 below.

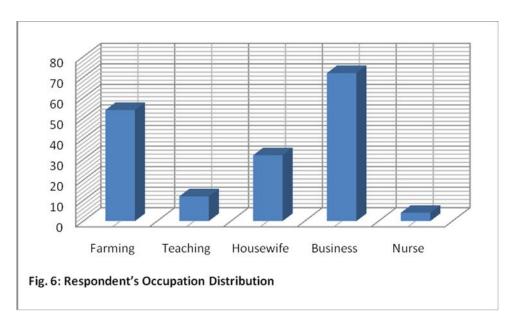


Table 7: Respondents' Awareness of Secondary Infertility

Items	N	(%)
Yes	83	69.17
No	37	30.83
Total	120	100

The result in table 7 presents the respondents awareness of secondary infertility. The result reports that the majority of the respondents 83 (69.17%) were of the viewed that they are aware of secondary

infertility. while only 37 (30.83%) of the respondent reported not being aware. Figure 7 below presents a graphical representation of the result.

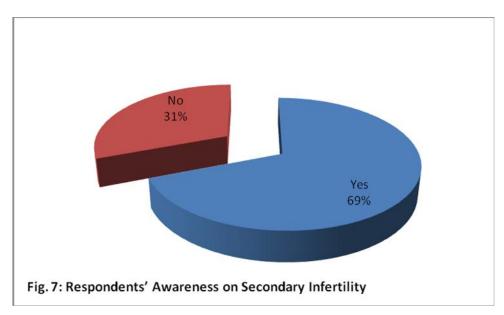


Table 8: Respondents' view on secondary infertility

Secondary Infertility	N	(%)
Inability to conceive after one or two children	93	77.5
Failure to carry pregnancy to term	21	17.5
None of the above	2	1.667
All of the above	4	3.333
Total	120	100

The result in table 8 presents the respondents' view on secondary infertility. The result discloses that majority of the respondents (77.5%) view secondary infertility as the inability to conceive after one or two children

while 17.5% viewed secondary infertility as failure to carry pregnancy to term. See a graphical representation of this result in figure 8 below.

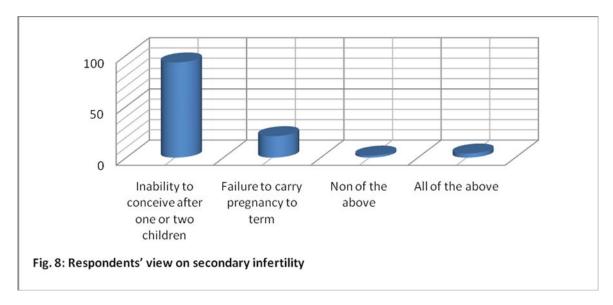


Table 9: Respondents' view on age affecting infertility

Items	N	(%)
Yes	87	72.5
No	33	27.5
Total	120	100

Source: Field Work, 2018

The result in table 9 presents the respondents' view on age affecting infertility. The result discloses that the majority of the respondents (72.5%) were of the view

that age affects infertility while the rest of 27.5% view otherwise. See figure 9 for a graphical representation of this result.



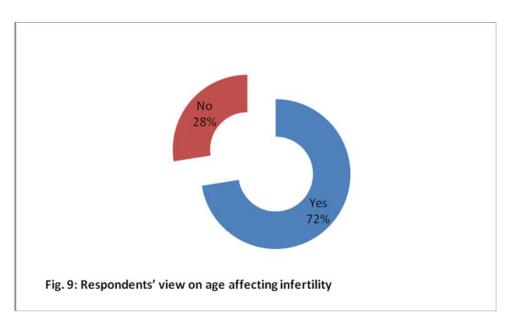


Table 10: Respondents' view on secondary infertility occurrence

Secondary infertility occur mostly in	N	(%)
women of younger age (20 - 30 years)	37	30.8
women of older age (31 - 45 years)	75	62.5
None of the above	6	5
All of the above	2	1.67
Total	120	100

The result in table 10 presents respondents' view on secondary infertility occurrence. About 75 (62.5%) of the participants reported that secondary infertility occur mostly in women of older age (31 - 45 years)

followed by women of younger age (20-30 years) which accounted about 37 (30.8%).. See a graphical representation of the study in figure 10 below.

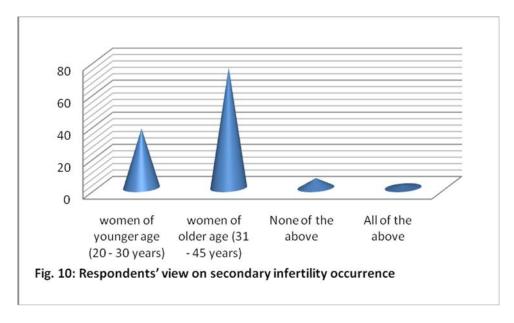


Table 11: Reasons of secondary infertility

Reasons	N	(%)
Male partner	27	22.5
Female partner	53	44.2
Both partner	40	33.3
All of the above	0	0
Total	120	100

The result in table 11 presents respondents' reasons behind secondary infertility. About 53 (44.2%) of the participants reported that secondary infertility is due to female partner followed by 40 (33.3%) that reported

that it is due to both partner while the rest 27 (22.5%) were of the view that it is due to male partner. See a graphical representation of the study in figure 11 below.

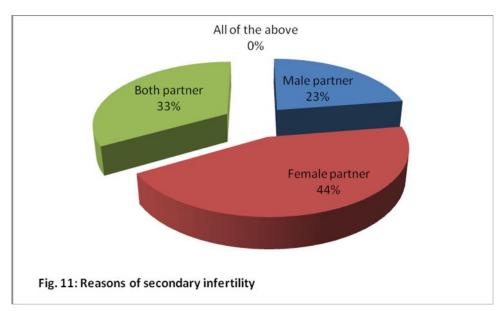


Table 12: Reasons for Secondary infertility in female

Secondary infertility in female is due to	N	(%)
Block fallopian tube	35	29.2
Endometriosis	17	14.2
Uterine Fibroids	56	46.7
All of the above	12	10
Total	120	100

Source: Field Work, 2018

The result in table 12 presents respondents view of reasons for secondary infertility in female. The result shows that it is due to uterine fibroids (46.7%), followed by block fallopian tube (29.2%) then endometriosis (14.2%) and finally, 10% viewed all of

the above (i.e., block fallopian tube, uterine fibroids and endometriosis) as reasons for secondary infertility in female. See figure 12 for a graphical representation of the presentation.

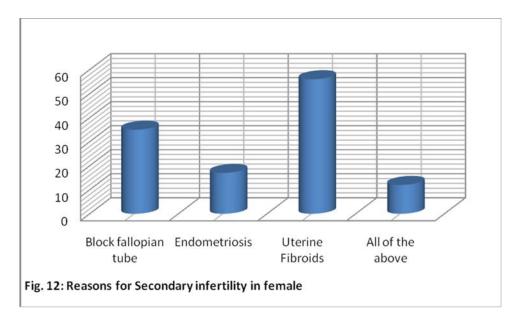


Table 13: Reasons for Secondary infertility in male

Secondary infertility in male is due to	N	(%)
Infection	52	43.3
Erectile dysfunction	38	31.7
Smoking	17	14.2
All of the above	13	10.8
Total	120	100

The result in table 13 presents respondents view of reasons for secondary infertility in male. The result shows that it is due to infection (43.3%), followed by erectile dysfunction (31.72%) then smoking (14.2%)

and finally, 10.8% viewed all of the above (i.e., infection, erectile dysfunction and smoking) as reasons for secondary infertility in male. See figure 13 for a graphical representation of the presentation.

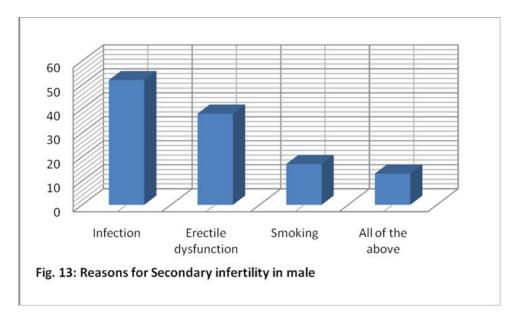


Table 14: Reasons for Secondary infertility in both male and female

Secondary infertility in both male and female is due to	N	(%)
wrong timing of sexual intercourse	3	2.5
immunological factors	12	10
All of the above	0	0
None of the above	105	87.5
Total	120	100

The result in table 14 presents respondents view of reasons for secondary infertility in both male and female. The result shows that majority of the respondents (87.5%) were of the view that wrong timing of sexual intercourse or immunological factors is the reason to secondary infertility in both male and

female while the rest of 10% and 2.5% respectively were of the view that immunological factors and wrong timing of sexual intercourse were the reasons behind secondary infertility in both male and female. See figure 14 for a graphical representation of the presentation.

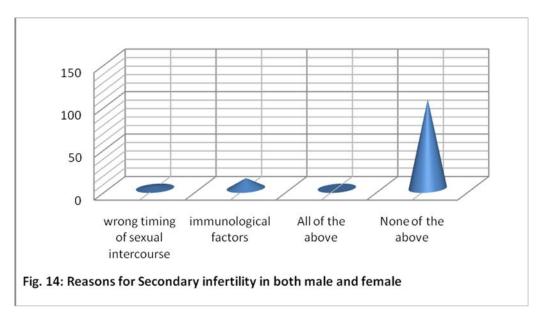


Table 15: Secondary infertility has psychosocial effect on women

Items	N	(%)
Yes	108	90
No	12	10
Total	120	100

Source: Field Work, 2018

The result in table 15 presents the respondents view on secondary infertility having psychosocial effect on women. The result reports that the majority of the respondents 108 (90%) were of the viewed that secondary infertility has psychosocial effect on

women, while only 12 (10%) of the respondent reported secondary infertility have no psychosocial effect on women. Figure 15 below presents a graphical representation of the result.



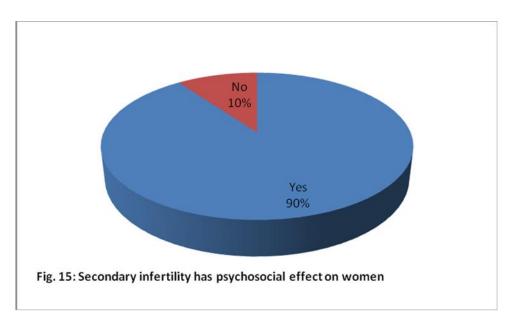


Table 16: Psychosocial effects of secondary infertility on women

Effects	N	(%)
Frustration	37	30.8
Depression	43	35.8
Isolation	24	20
All of the above	16	13.3
Total	120	100

The result in table 16 presents the respondents psychosocial effects of a secondary infertility on women. The result shows that depression (35.8%) is reported as the most psychosocial effects of secondary infertility on women, followed by frustration (30.8%),

isolation (20%), then about 13.3% who reported that the psychosocial effects of secondary infertility on women are frustration, depression and isolation. See a chart representation of the result in figure 16.

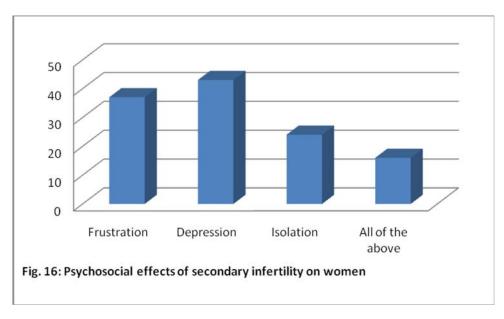


Table 17: Psychosocial effects of secondary infertility considering gender

Women with secondary infertility are more affected		
psychologically than males	N	(%)
Yes	68	56.7
No	52	43.3
Total	120	100

The result in table 17 presents the respondents view on psychosocial effects of secondary infertility considering gender. The result shows that women with secondary infertility are more affected psychologically

than males accounting about 56.7% of the respondents that agreed while the rest of 43.3% disagreed. See a chart representation of the result in figure 17.

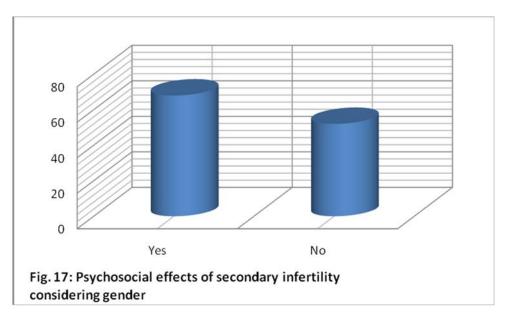


Table 18: Secondary infertility has consequences

Responses	N	(%)
Yes	117	97.5
No	3	2.5
Total	120	100

Source: Field Work, 2018

The result in table 18 presents the respondents view on secondary infertility having consequences. The result shows that majority of the respondents were of the view that secondary infertility has consequences

(97.5%) while very few of the respondents (2.5%) viewed otherwise. See a chart representation of the result in figure 18.

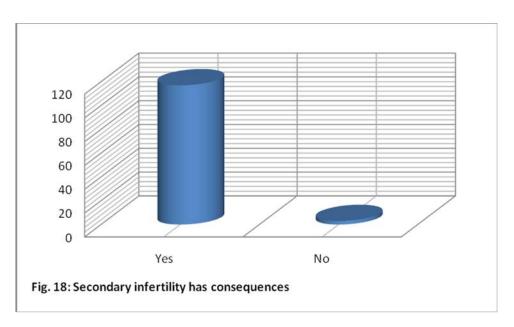


Table 19: Secondary infertility can lead to

Items	N	(%)
Broken home	53	44.2
Rejection	17	14.2
Adoption of children of unknown parents	29	24.2
All of the above	21	17.5
Total	120	100

The result in table 19 presents the respondents view on secondary infertility leading to broken homes (44.2%), adoption of children of unknown parents (24.2%),

rejection (14.2%) and all of the above (17.5%). See a chart representation of the result in figure 19.

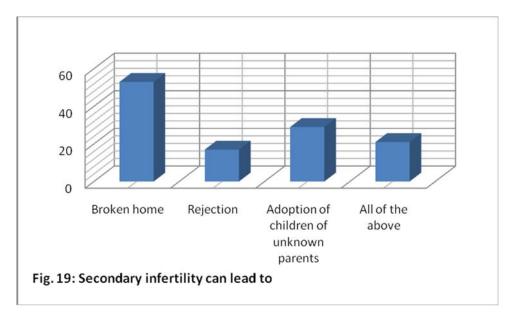


Table 20: Secondary infertility can lead to polygamy

Responses	N	(%)
Yes	79	65.8
No	41	34.2
Total	120	100

The result in table 20 presents the respondents view on secondary infertility leading to polygamy. The result shows that majority of the respondents were of the view that secondary infertility can lead to polygamy (65.8%) while the other respondents (34.2%) viewed otherwise. See a chart representation of the result in figure 20.

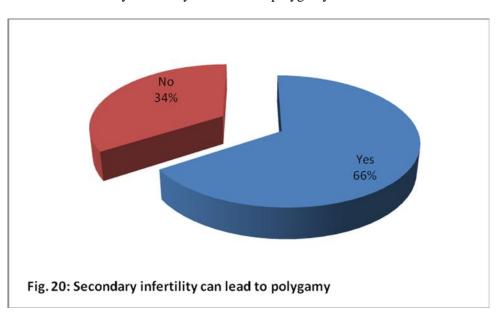


Table 21: Secondary infertility can be treated

Responses	N	(%)
Yes	67	55.8
No	53	44.2
Total	120	100

Source: Field Work, 2018

The result in table 21 presents that majority of the respondents' view that secondary infertility can be treated (55.8%) while the rest of 44.2% viewed

secondary infertility has untreatable ailment. See a graphical representation of the result in figure 21 below.



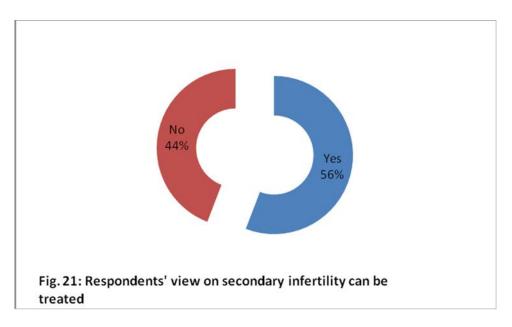
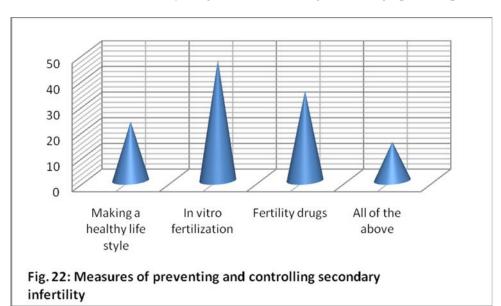


Table 22: Measures of preventing and controlling secondary infertility

Secondary infertility can be taken care of by	N	(%)
Making a healthy life style	23	19.2
In vitro fertilization	47	39.2
Fertility drugs	35	29.2
All of the above	15	12.5
	120	100

The result in table 22 presents respondents view that secondary infertility can be taken care of by in vitro fertilization (39.2%), fertility drugs (29.2%), making a

healthy life style (19..2%) and the rest of the respondents (12.5%) said all of the above. See a graphical representation of the result in figure 22.



Discussion

The study established that there exists a good knowledge of secondary infertility among women. They viewed secondary infertility as the inability to conceive after one or two children and failure to carry pregnancy to term. There is an opinion by the majority of the respondents that age affects infertility and that secondary infertility occur mostly in women of older age (31 – 45 years) followed by women of younger age (20 – 30 years). This finding supports the findings of Ali *et al.* (2011) whose reports showed that people have adequate knowledge about infertility therefore necessitating couples seek timely medical care and misconceptions can be rectified.

The study finding discloses that the possible causes of secondary infertility is due to female partner followed by both partners contributing while the respondents see male partners as the least causes to secondary infertility. The reasons behind secondary infertility in female are due to uterine fibroids, followed by block fallopian tube, then endometriosis while the reasons behind secondary infertility in male could be due to infection, followed by erectile dysfunction, and then smoking. The reasons for secondary infertility in both male and female are due to wrong timing of sexual intercourse and immunological factors. This study added to the findings of Akpor et al. (2016) whose findings showed that social cultural factors and lack of psychological support from the in-laws as the major factors influencing perception of psychosocial effects infertility among childbearing women.

The findings from the study showed that secondary infertility has psychosocial effect on women and that the most psychosocial effect of secondary infertility on women is depression followed by frustration and isolation. Women with secondary infertility are more affected psychologically than males. Secondary infertility has consequences such as broken homes, adoption of children of unknown parents and rejection which could also lead to polygamy. This finding support.

The finding from the study discloses that secondary infertility is seen as treatable ailment through vitro fertilization, fertility drugs and making a healthy life style. This finding supported Akpor *et al.* (2016) on techniques that can be used in managing cases of secondary infertility among couples. The secondary prevention strengthens the internal defense and resources by establishing treatment plan for infertility including psychotherapeutic intervention while the

tertiary prevention is strengthens resistances to stressor through educating of infertile women and assist in preventing a recurrence of the stress response (Akpor & Adebusuyi, 2016).

Conclusion

The respondents are knowledgeable of secondary infertility, viewing secondary infertility as the inability to conceive after one or two children and failure to carry pregnancy to term. Age according to the respondents affects infertility and that secondary infertility occur mostly in women of older age (31 - 45 years) followed by women of younger age (20 - 30 years).

Secondary infertility among women is due to female partner followed by both partners contributing while the respondents see male partners as the least causes to secondary infertility. The reasons behind secondary infertility in female are due to uterine fibroids, followed by block fallopian tube, then endometriosis while the reasons behind secondary infertility in male could be due to infection, followed by erectile dysfunction, and then smoking. The reasons for secondary infertility in both male and female are due to wrong timing of sexual intercourse and immunological factors.

Secondary infertility is viewed with psychosocial effect on women and that the most psychosocial effect of secondary infertility on women is depression followed by frustration and isolation. Women with secondary infertility are more affected psychologically than males. Secondary infertility has consequences such as broken homes, adoption of children of unknown parents and rejection which could also lead to polygamy.

Secondary infertility is seen as treatable ailment through vitro fertilization, fertility drugs and making a healthy life style.

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