



Perceived Health Implications Of Infertility Among Women Of Reproductive Age In Port Harcourt Metropolis Of Rivers State

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ABSTRACT

The study investigated the perceived health implications of infertility among women of reproductive age in Port Harcourt Metropolis of Rivers State. A descriptive survey design was adopted as the research design for this study. The population of the study comprised of all the 281,120 women of reproductive age within Port Harcourt Metropolis. Purposive sampling technique was used to select a sample size of 400 for the study. A standardized questionnaire was used for data collection. Data was analyzed using frequency count, percentage, mean and ANOVA for relevant variables. The findings of the study revealed that infertility has its physical, social and psychological health implications. However, the tested hypotheses showed no statistically significant difference between the physical ($p>0.05$), psychological ($p>0.05$) and social ($p>0.05$) health implications of women of reproductive age (based on age) in Port Harcourt Metropolis. It was concluded that, although, the physical health implications were found to be very low and insignificant, the social and psychological health implications call for serious concerns. Therefore, it was recommended among others that, the government should work in collaboration with medical experts to help identify population(s) that should be targeted as well as conveying the consequences of the health issues associated with risk behaviors in a clear and unambiguous manner.

Keywords: Infertility, reproductive age, health issues

INTRODUCTION

In many African societies, infertility is highly stigmatized and carries with it excruciating consequences. The Centres for Diseases Control and Prevention (CDC, 2016) noted that infertility has caused great personal suffering and distress in many families and female infertility is the major disorder which has altered the man kind lack of conception and reproducibility. According to Araoye (2013), many societies only tend to value a woman if she is able to produce at least one child, and a marriage can be considered a failure when the couple cannot conceive as the act of conceiving a child can be linked to the couple's consummation of marriage, and reflect their social role in society. Otworì (2013) stated that, infertility is the inability of a couple to conceive within one year of unprotected intercourse of reasonable frequency. The World Health Organization (2011) report showed that, worldwide, the prevalence of infertility is generally quoted as occurring in 8-12% of couples. According to Idrisa (2006), about 30% of infertility cases are due to female problems, 30% to male problems, and 30% to combined male/female problems, while in 10%, the cause of infertility remain unexplained. In Nigeria, voluntary childlessness is very rare; therefore, it is likely that married women with no births are unable to have

children. According to reports in the Nigerian Demographic and Health Survey (2013), results suggest that primary infertility is low, with 3 percent of all women unable to have children.

However, Cwikel, Sheiner and Gidron (2017) noted that, despite the fact that various studies have demonstrated the importance of the mind–body connection and fertility, the psychosocial aspects of infertility have not been adequately addressed in clinical practice. Fertility treatments, ranging from medical monitoring, to hormonal remedies and in vitro fertilization (IVF), carry physical, economical and emotional burdens on women and their partners. A couple that is trying to conceive will undoubtedly experience feelings of frustration and disappointment if a pregnancy is not easily achieved. However, if the difficulties progress and the man and or woman are labelled as having fertility problems then this may result in a severe insult to self-esteem, body image, and self-assessed masculinity or femininity. There is consensus in literature that attention to the psychological aspects of infertility is strongly advisable.

A number of studies have found that the incidence of depression in infertile couples presenting for infertility treatment is significantly higher than in fertile controls, with prevalence estimates of major depression in the range of 15%-54% (Domar 2012; Demyttenaere 2011). Anxiety has also been shown to be significantly higher in infertile couples when compared to the general population, with 8%-28% of infertile couples reporting clinically significant anxiety (Chen, Chang, Tsai, & Juang, 2014). A research conducted by Roupa, Polikandrioti Sotiropoulou, Faros, Koulouri, Wozniak and Gourni (2018) revealed that infertility is a multidimensional problem associated with social, economic and cultural implications, which can take threatening proportions in countries with strong demographic problems. However, there is need to fill this gap in research with regards to the challenges and problems of infertility among women of reproductive age. Hence in an effort to proffer possible solutions to this problem among women of reproductive age it became imperative for the researcher to investigate the perceived health implications of infertility among women of child bearing age in Port Harcourt Metropolis, Rivers State.

Research Questions and Hypotheses

Three research questions and three hypotheses were stated to guide the study:

Does infertility influence the physical health of women of reproductive age in Port Harcourt Metropolis?

1. Does infertility influence the psychological health of women of reproductive age in Port Harcourt Metropolis?
2. Does infertility influence the social health of women of reproductive age in Port Harcourt Metropolis?

Hypotheses

1. There is no significant difference between the physical health implications of women of reproductive age (based on age) in Port Harcourt Metropolis.
2. There is no significant difference between the psychological health implications of women of reproductive age (based on age) in Port Harcourt Metropolis.
3. There is no significant difference between the social health implications of women of reproductive age (based on age) in Port Harcourt Metropolis.

METHODOLOGY

Research design: The study adopted the descriptive cross-sectional survey research design.

Population of the study: The study population comprised of all the 281,120 women of reproductive age within Port Harcourt Metropolis in Rivers State (Rivers State City Population Demographics, 2016).

Sample and sampling technique: The sample size for the study was 400 respondents. The purposive sampling technique was adopted to select the sample for the study.

Instrument for data collection: The instrument for data collection was a standardized questionnaire titled “Questionnaire on the Perceived Health Implications of Infertility”.

Validity of the Instrument: Validity is the ability of an instrument to measure what it is intended to measure. The validity of the instrument was established by the project supervisor and a specialists in statistics in the Department of Human Kinetics, Health and Safety Education, Ignatius Ajuru University

of Education Port Harcourt. The corrections by the experts and the supervisors were effected on the instrument by the researcher.

Reliability of the instrument

Reliability refers to the consistency of a measure of a concept. To ascertain the reliability of the instrument, the instrument was subjected to a reliability test using the Cronbach Alpha statistics for testing the internal consistency of an instrument. A reliability index of 0.80 was obtained indicating that the instrument was reliable.

Method of Data Collection

The researcher employed the help of two research assistants in the administration of the questionnaire to the respondents. Introduction of self and purpose of the study was made by the researcher, questions asked were answered and willing respondents were administered the questionnaire for data collection. The questionnaires which were filled were retrieved immediately.

Method of Data Analyses

The data collected were analyzed using the statistical package for social sciences (SPSS) version 20.0 and data were presented using descriptive statistics to answer research questions and inferential statistics to test hypotheses at 0.05 alpha level. Frequency count, percentage and mean were used to answer research questions 1, 2 and 3. Hypotheses 1, 2 and 3 were tested using the Analysis of Variance at 95% confidence interval and 0.05 alpha level.

RESULTS

Results: The results of the study are presented in table 1-6 below:

Table 1: Influence of infertility on the physical health of women of reproductive age in Port Harcourt Metropolis

{N= 358; 15-24yrs = 110; 25-34yrs = 141; 35-44yrs = 107}

S/N	ITEMS	Age groups (yrs)	SA (4)	A (3)	D (2)	SD (1)	Std. Dev	X	Remark
1.	Feels pains in the waist every month	15-24	8	12	47	43	0.00	2.45	Agreed
		25-34	12	15	53	61	0.01	2.30	Agreed
		35-44	9	13	35	50	0.01	2.28	Agreed
2.	Often lose your appetite for no particular reason	15-24	10	12	40	48	0.00	2.30	Agreed
		25-34	10	17	50	64	0.02	2.22	Agreed
		35-44	12	18	31	46	0.03	2.35	Agreed
3.	Feel dizzy sometimes for no particular reasons	15-24	6	9	50	45	0.02	2.38	Agreed
		25-34	8	11	61	61	0.03	2.35	Agreed
		35-44	11	16	37	43	0.03	2.50	Agreed
4	Sometimes experiences diarrhea without any known cause	15-24	7	13	38	52	0.03	2.65	Agreed
		25-34	9	18	54	60	0.01	2.28	Agreed
		35-44	11	11	45	40	0.02	2.32	Agreed
5.	Usually experiences	15-24	10	10	43	47	0.00	2.28	Agreed

	increase blood pressure	25-34	11	16	50	64	0.01	2.28	Agreed
		35-44	10	12	38	47	0.00	2.48	Agreed
6.	Usually have sleepless nights	15-24	13	11	36	50	0.01	2.55	Agreed
		25-34	9	18	54	60	0.01	2.45	Agreed
		35-44	11	11	44	41	0.02	2.40	Agreed
7.	Sweat often	15-24	9	10	45	46	0.01	2.26	Agreed
		25-34	14	13	61	53	0.02	2.44	Agreed
		35-44	14	10	37	46	0.02	2.63	Agreed
8.	Lose weight without any known loss.	15-24	8	12	45	45	0.00	2.45	Agreed
		25-34	18	13	51	59	0.02	2.30	Agreed
		35-44	12	8	50	37	0.03	2.28	Agreed
Total Mean for 15-24 yrs = 14.68, Grand mean= 1.84									Agreed
Total Mean for 25-34 yrs = 14.73, Grand mean= 1.84									Agreed
Total Mean for 35-44 yrs = 14.73, Grand mean= 1.91									Agreed
Final Grand Mean = 1.86									

From the result on table 1 above, in response to research question 1 in items 1,2,3,4, 5,6,7 and 8, the majority of the respondents generally agreed that there has been some physical health implication as a result of infertility in Port Harcourt Metropolis (as indicated by grand means of 1.84, 1.84 and 1.91 respectively). The final grand mean (1.86) also affirms this agreement.

Table 2: Influence of infertility on the psychological health of women of reproductive age in Port Harcourt Metropolis

{N= 358; 15-24yrs = 110; 25-34yrs = 141; 35-44yrs = 107}

S/N	ITEMS	Age groups (yrs)	SA (4)	A (3)	SD (2)	D (1)	Std. Dev	X	Remark
1.	Discouraged about life generally.	15-24	40	46	10	14	0.37	3.02	Strongly Agreed
		25-34	62	45	23	11	0.40	3.12	Strongly Agreed
		35-44	33	45	16	13	0.33	2.92	Strongly Agreed
2.	Feel there is somebody behind all your problems	15-24	50	34	18	8	0.41	3.15	Strongly Agreed
		25-34	58	56	15	12	0.40	3.13	Strongly Agreed
		35-44	49	30	16	12	0.39	3.08	Strongly Agreed
3.	Feel worried about the future	15-24	53	35	10	12	0.42	3.17	Strongly Agreed
		25-34	58	57	13	13	0.40	3.13	Strongly Agreed
		35-44	49	39	9	10	0.42	3.19	Strongly Agreed
4	Feel anxious about so many things	15-24	50	32	12	16	0.38	3.05	Strongly Agreed
		25-34	61	51	14	15	0.40	3.12	Strongly Agreed
		35-44	51	40	9	7	0.44	3.26	Strongly Agreed
5.	Easily get irritated	15-24	51	38	10	11	0.42	3.17	Strongly Agreed
		25-34	62	44	17	18	0.38	3.06	Strongly Agreed
		35-44	47	36	13	11	0.40	3.11	Strongly Agreed
6.	Often moody or sad	15-24	48	44	9	9	0.42	3.19	Strongly Agreed
		25-34	54	61	14	12	0.40	3.11	Strongly Agreed
		35-44	39	42	13	13	0.36	3.00	Strongly Agreed
7.	Feel depressed often when you see other women with their children	15-24	41	47	12	10	0.39	3.08	Strongly Agreed
		25-34	56	56	13	16	0.39	3.08	Strongly Agreed
		35-44	41	43	12	11	0.38	3.07	Strongly Agreed
8.	Feel denied	15-24	45	45	11	9	0.41	3.15	Strongly Agreed
		25-34	51	64	15	11	0.39	3.10	Strongly Agreed
		35-44	50	36	11	10	0.42	3.18	Strongly Agreed
Total Mean for 15-24 yrs = 14.68, Grand mean= 3.12									
Total Mean for 25-34 yrs = 14.73, Grand mean= 3.11									
Total Mean for 35-44 yrs = 14.73, Grand mean= 3.10									
Final Grand Mean = Mean of Grand Means = 3.11									

From the result on table 2 above, in response to research question 2 in items 1,2,3,4, 5,6,7 and 8, the majority of the respondents generally strongly agreed that there has been a low psychological health implication as a result of infertility in Port Harcourt Metropolis (as indicated by grand means of 3.12, 3.11 and 3.10 respectively). The final grand mean (3.11) also affirms this strong agreement.

Table 3: Influence of infertility on the social health of women of reproductive age in Port Harcourt Metropolis

{N= 358; 15-24yrs = 110; 25-34yrs = 141; 35-44yrs = 107}

S/N	ITEMS	Age groups (yrs)	SA (5)	A (4)	D (2)	SD (1)	Std. Dev	X	Remark
1.	Feel uncomfortable associating with other women with children.	15-24	35	41	20	14	2.88	3.02	Strongly Agreed
		25-34	48	48	22	23	2.86	3.12	Strongly Agreed
		35-44	30	40	20	17	2.78	2.92	Strongly Agreed
2.	Get harassed by the family of your husband often	15-24	45	32	20	13	2.99	3.15	Strongly Agreed
		25-34	56	57	14	14	3.10	3.13	Strongly Agreed
		35-44	44	35	18	10	3.06	3.08	Strongly Agreed
3.	Feel rejected in the midst of your husband's relations	15-24	49	40	13	8	3.18	3.17	Strongly Agreed
		25-34	55	58	16	12	3.11	3.13	Strongly Agreed
		35-44	49	36	12	10	3.16	3.19	Strongly Agreed
4	Feels stigmatized because of your predicament	15-24	47	33	15	15	3.02	3.05	Strongly Agreed
		25-34	45	63	17	16	2.97	3.12	Strongly Agreed
		35-44	50	37	13	7	3.21	3.26	Strongly Agreed
5.	Have faced several verbal abuse because of your predicament	15-24	48	35	13	14	3.06	3.17	Strongly Agreed
		25-34	44	52	22	23	2.83	3.06	Strongly Agreed
		35-44	47	36	13	11	3.11	3.11	Strongly Agreed
6.	There is so much pressure from friends and relations	15-24	48	44	9	9	3.19	3.19	Strongly Agreed
		25-34	52	56	17	16	3.02	3.11	Strongly Agreed
		35-44	42	45	10	10	3.11	3.00	Strongly Agreed
7.	Feel alone and lonely sometimes because of your predicament	15-24	39	46	15	10	3.04	3.08	Strongly Agreed
		25-34	50	58	19	14	3.02	3.08	Strongly Agreed
		35-44	47	42	8	10	3.18	3.07	Strongly Agreed
8.	Feel uncomfortable associating with other women with children.	15-24	45	45	11	9	3.15	3.15	Strongly Agreed
		25-34	41	69	19	12	2.99	3.10	Strongly Agreed
		35-44	44	42	8	13	3.09	3.18	Strongly Agreed
		Total Mean for 15-24 yrs = 24.51, Grand mean= 3.06							Strongly Agreed
		Total Mean for 25-34 yrs = 23.89, Grand mean= 2.99							Strongly Agreed
		Total Mean for 35-44 yrs = 24.70, Grand mean= 3.09							Strongly Agreed
		Final Grand Mean = Mean of Grand Means = 3.05							Strongly Agreed

From the result on table 3 above, in response to research question 3 in items 1,2,3,4, 5,6,7 and 8, the majority of the respondents generally agreed that there has been some social health implication as a result of infertility in Port Harcourt Metropolis (as indicated by grand means of 3.12, 3.11 and 3.10 respectively). The final grand mean (3.11) also affirms this agreement.

Table 4: ANOVA Result showing difference between the physical health implications of women of reproductive age (based on age) in Port Harcourt Metropolis

Age group	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	11.367	314	.812	1.577	.249	Accepted
Within Groups	4.633	9	.515			
Total	16.000	323				

Not significant $p > 0.05$

A one way between group analysis of variance was conducted to examine the significant difference between the physical health implications of women of reproductive age (based on age) in Port Harcourt Metropolis. The result shows a statistically non-significant difference ($p > 0.05$, $F(9,314) = 1.577$, $p = 0.249$) between the two variables. The null hypothesis was therefore accepted.

Table 5: ANOVA Result showing difference between the psychological health implications of women of reproductive age (based on age) in Port Harcourt Metropolis

Age group	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	12.292	313	.946	3.546	0.67	Accepted
Within Groups	2.667	10	.267			
Total	14.958	323				

Not significant $p > 0.05$

A one way between group analysis of variance was conducted to examine the significant difference between the psychological health implications of women of reproductive age (based on age) in Port Harcourt Metropolis. The result shows a statistically non-significant difference ($p > 0.05$, $F(10,313) = 3.546$, $p = 0.67$) between the two variables. The null hypothesis was therefore accepted.

Table 6: ANOVA Result showing difference between the social health implications of women of reproductive age (based on age) in Port Harcourt Metropolis

Age group	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	11.333	315	.756	1.417	.372	Accepted
Within Groups	2.667	5	.533			
Total	14.000	320				

Not significant $p > 0.05$

A one way between group analysis of variance was conducted to examine the significant difference between the social health implications of women of reproductive age (based on age) in Port Harcourt Metropolis. The result shows a statistically non-significant difference ($p > 0.05$, $F(5,315) = 1.417$, $p = 0.372$) between the two variables. The null hypothesis was therefore accepted.

DISCUSSION OF FINDINGS

The findings of this study showed that the majority of the respondents strongly agreed that there are less physical health implications among women of reproductive age as a result of infertility in Port Harcourt Metropolis (as indicated by grand means of 1.84, 1.84 and 1.94 respectively). The final grand mean (1.86) also affirmed there are less physical health implications. Also, from the statistical evidence in the test for hypothesis 1, the result showed no significant difference among the groups since the significant value 0.249 was greater than the level of significance 0.05. This result was further corroborated by the findings and opinions of Hess, Ross & Gililland (2018) who conducted a related study found that there was no physical health implication of infertility among women of reproductive age.

The findings of this study revealed that the majority of the women showed conditions of anxiety, worries, irritation, paranoia, and moodiness as a result of the condition of infertility. Thus, the result showed to a very high extent that there are psychological health implications among women of reproductive age as a result of infertility in Port Harcourt Metropolis (as indicated by grand mean of 3.12, 3.11 and 3.10 respectively). The final grand mean (3.11) also affirms there is a high extent. Also, from statistical evidence, in the test for hypothesis 2, the result showed no significant difference among the age groups since the significant value 0.67 was greater than the level of significance 0.05. This implies that age has no significant role to play when it comes to the psychological effects of infertility health status on women of reproductive age. This result is in consonance with the findings of Oladeji and Ola-Olorun (2017) who conducted a related study titled "Depression among infertile women in Ogbomoso land" concluding that age does not necessarily influence the infertility health status of women of reproductive age psychologically.

The findings of this study revealed that the majority of the respondents generally agreed to a high extent that there has been a social health implication among women of reproductive age as a result of infertility in Port Harcourt Metropolis (as indicated by grand mean of 3.06, 2.99 and 3.09 respectively). This was evident from the responses of the respondents who indicated attitudes of being left alone, or stigmatized,

or harassed, or rejected, or having suffered verbal abuse from people, or hatred from in-laws, or suffered pressure from friends. The final grand mean (3.05) also affirms there is a high extent. Also, from the statistical evidence in the test for hypothesis 3, the result showed no significant difference in social health implications among the groups. To further corroborate the findings of this study, a related study on social health implications of infertility on women was conducted by Hasanpoor-Azghdy, Simbar, and Vedadhir (2012), the findings of the study indicated that the consequences of infertility include: violence including psychological violence and domestic physical violence: marital instability or uncertainty: social isolation including avoiding certain people or certain social events and self-imposed isolation from family and friends: social exclusion and partial deprivation including being disregarded by family members and relatives and reducing social interactions with the infertile woman and social alienation.

CONCLUSION

The study has shown with statistical evidence that infertility has its physical, social and psychological health implications. Although, the physical health implications were found to be very low and insignificant, the social and psychological health implications call for serious concerns. It has therefore become very obvious from the findings of this study that the importance of tackling the problem of health implications of infertility among women of reproductive age cannot be over emphasized.

5.3 RECOMMENDATIONS

The following are hereby recommended for effective adjustment of women that are physically, socially or psychologically affected by infertility and its consequences:

1. The medical experts should make efforts towards gathering information by conducting a health needs assessments and other efforts to determine who is at risk.
2. The government should work in collaboration with medical experts to help identify population (s) that should be targeted as well as conveying the consequences of the health issues associated with risk behaviors in a clear and unambiguous fashion.
3. The medical experts in all the health facilities should help affected women understand severity of the situation so as to enable them overcome the social and psychological consequences of infertility.

The government should incorporate the services of medical agencies to ensure that the right information is communicated to the target population with regards to the steps that are involved in taking the recommended action and highlighting the benefits to these people.

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