REVISITING MALE STERILIZATION FOR CONTRACEPTION IN PORT HARCOURT, NIGERIA: WHERE DO THE WOMEN STAND

ABSTRACT

Background: the various advancements in the armamentarium of modern contraceptive service are many, yet the methods available for men are few; worse still, their effective participation is embarrassingly low. Considering the high failure rate of the male condom as a contraceptive method and the numerous unwanted effects of the varied female methods, vasectomy remains a promising way to go in contraception; hence the periodic monitoring of its acceptance/practice trend, especially by women, in this part of the globe.

Objective: to assess the knowledge and willingness to support the practice of vasectomy by women in Port Harcourt, Nigeria.

Method: it was a cross-sectional descriptive questionnaire based prospective study of consenting 249 parous women attending the family planning clinic in the 2 University Teaching Hospitals in Port Harcourt. The pre-tested validated questionnaire was administered on the participants by two trained assistants. Data on their socio-demographic characteristics, awareness and willingness to support the practice of vasectomy were obtained and entered into excel sheet and analyzed using SPSS version 20, taking p value of 0.05 at 95 percent confidence interval as significant. The result was expressed in tables of percentages and frequencies.

Results: of the two hundred and forty nine women who were involved in the study, 224(89.96%) were within the reproductive age grouping 15 – 45 and 25(10.04%) were above 45 years. Most of them, 234 (93.98%) had at least a secondary education. A high percentage of the respondents,

212(83.14%) knows vasectomy does not reduce potency, they could not say for sure if it affects male fertility (51.81%); but 164(65.86%) knows it mechanism of action, 191(76.71%) said it is very effective means of contraception while 184(73.90%) knows it is safe. One hundred and forty one (56.63%) of the women will not give consent for their spouse to have vasectomy done. However, if they are reassured on their worries on vasectomy, 135 (54. 22%) will give their support for the procedure. Reasons for not wanting vasectomy include being a permanent method (30.53%), it surgical method (20.60%) and against their faith (20.22%).

Conclusion: the knowledge of vasectomy of women in Port Harcourt is high but their willingness to support this practice is low. Reassurance on their concerns improved their support for the procedure. Sustained adequate counseling is needed to surmount this obstacle to the much desired practice of vasectomy in this part of the world.

Key words: vasectomy, contraception, counseling, Port Harcourt, Nigeria.

INTRODUCTION

The term contraception is used to describe all measures, temporary or permanent, designed to prevent pregnancy due to coital act [1]. Historically, one of the very first experimentation on contraception was done on a female animal [2]. In those days, the Arabian artisans and merchants had to block the external genitalia of the female heavy load carrying camels with coble to prevent their getting pregnant in their long journey across the desert. That was a kind of

inert barrier contraception done on the female animal (camels) and marked the conception of contraception in the human being.

Since then till now, most of the many means of contraceptive methods available are on the female human; with only two in male: vasectomy and male condom. The male condom is notorious for its high user failure rate [3] and is associated with apparently poor sexual satisfaction in many users (both sex alike) [4]; hence marking vasectomy out as the only effective one of the two available means of contraception that men can use. More disturbing is the fact that many of these female methods of contraception have very worrisome untoward effects such as irregular vaginal bleeding, raised blood pressure, mood swing, possible weight gain and blood glucose destabilizing effects as seen in hormonal contraceptives [5,6], to menorrahgia, genital tract infections, recurrent lower abdominal colicky pains and missing string as noted in the various intrauterine devices, among others [6,7]. Occasionally, some of these side effects could be life threatening [7,8] and many may affect the quality of life of the female user [6,9].

Vasectomy is the division or occlusion of the vas deferens to prevent the passage of sperm [3]. Sixteen weeks following the procedure or after about 20 ejaculates, there should be azoospermia. The failure rate is 1 in 2000 procedure, hence a very high efficacy. Though chronic lower abdominal pains and wound infection could occur, however, literature has not proven the various concerns linking this procedure with prostatic and testicular malignancy [3,].

Over the years, many studies have evaluated the place of vasectomy as a contraceptive method; however, there is a paucity of study assessing the perception of women in the sterilization of men for contraception. In a systematic review of vasectomy surgical techniques, Labrecque et al [10]

showed that among the many varieties of surgical techniques used in performing vasectomy, current evidence supports the no-scalpel vasectomy as the safest method. In a literature review by Shattuck et al, vasectomy is one of the most effective contraceptive methods with virtually no side effect but is little used around the world [11]. In the study, awareness of this method ranged from 19.6% in Ethiopia, 39.6% in Turkish women to 97.4% in India. They found that part of the reason for the poor uptake of this method is the negative perceptions and erroneous assumptions of the couple, especially the male clients, on loss of masculinity and self esteem; such as being viewed to be under their wives' control. The study showed that both male and female believe that vasectomy makes the man develop poor erection/impotent/impaired ejaculation and will be generally weaker in all aspects of sexual activity; hence they reserved vasectomy for a last resort intervention [11]. Keramat et al in their North Eastern Iran study on barriers and facilitators affecting vasectomy acceptability established that it takes the couple deciding on vasectomy [12]. Hence the supportive attitude of the woman in making decision for vasectomy is cardinal. Assessing men's knowledge and attitude, White et al in an American study demonstrated that the respondents have good knowledge of vasectomy and the right attitude, especially those who had vasectomy [13]. It was shown that those who had vasectomy divulge the information to other men thereby influencing and encouraging towards accepting the procedure them.

Generally and comparatively, vasectomy is cheaper, very effective with quite acceptable safety profile as seen in its fewer and tolerable side effects [3,11,14]. Bearing these comparative advantages of vasectomy in mind[3,15], and Nigerian low contraceptive prevalence [16], one wonders why the apparent low practice of this appealing method of contraception considering the seriousness and drawbacks of virtually all the female contraceptive methods. The women who feel this burden of the various disturbing female contraceptive side effects should be the

fore front advocates of male sterilization for contraception; hence this study that seeks to assess the contribution of women in support of vasectomy for contraception.

METHODOLOGY

It was a cross-sectional descriptive questionnaire based prospective study of 249 parous women attending family planning clinic in the two University Teaching Hospitals in Port Harcourt, Port Harcourt, between 15th of June and 15th Sept 2021. Port Harcourt, the capital of the oil rich Rivers State and the area of the study, is about the fastest growing city in Nigeria and houses quite a number of giant industries in oil exploration and services; hence accommodating people from all walks of life.

The sample size was calculated using a simplified formula for calculating sample size [17]; using five average daily number of women attending the family planning clinic of the two University Teaching Hospitals in Port Harcourt, Port Harcourt; over a period of 3 months (from the department annual report books [18]). $n = N/1+N (d.)^2$, Where n = sample size, N = is the average number of women attending the family planning clinic of the University Teaching Hospitals over a period of 3 months which 600 participants and d = margin of error or precision expected (0.05). Using attrition of 5%, the sample size gotten is 249.

A pre-tested validated questionnaire was administered on the participants by two trained assistants who supervised and assisted information entry in the questionnaire sheet. Data on participants' socio-demographic characteristics, knowledge and willingness to support the practice of vasectomy were obtained and entered into excel sheet and analyzed using SPSS

version 20, taking p value of 0.05 at 95 percent confidence interval as significant. The result was expressed in tables of percentages and frequencies.

The respondents were counseled on the extent of the study, guaranteeing the confidentiality of any information they may give, protection of their privacy and freedom to withdraw from the study any time the so will. Participants' written consent was obtained.

Ethical approval for the study was obtained from the University of Port Harcourt Teaching Hospital ethical committee.

RESULTS

Of the two hundred and forty nine women who were involved in the study, 224(89.96%) were within the reproductive age grouping 15 – 45 and 25(10.04%) were above 45 years. Most of the participants, 234 (93.98%) had at least a secondary education. They were all parous women, 234(93.98%) of the women were married and 11(4.42%) were single (table 1). A high percentage of the respondents, 212(83.14%) knew vasectomy does not reduce potency, they could not say for sure if it affected male fertility (51.81%); but 164(65.86%) knew it mechanism of action (table 2), 191(76.71%) said it was a very effective means of contraception while 184(73.90%) knew it is safe. One hundred and forty one (56.63%) of the women will not give consent for their spouse to do vasectomy and 160(64.26%) will rather do a bilateral tubal ligation than allow a vasectomy on their spouse. However, if they are reassured on their worries on vasectomy, 135 (54. 22%) will give their support for this method of contraception. Reasons for not wanting vasectomy include: a permanent method (30.53%), a surgical method (20.60%) and against ones faith (20.22%) table 4

TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

VARIABLE	FREQUENCY (N = 249)	PERCENTAGE (N = 100)
AGE (YEARS)		
15-24	14	5.62
25-34	106	42.57
35-44	104	41.77
45 and above	25	10.04
PARITY		
1-5	233	93.57
>5	16	6.43
MARITAL STATUS		
Married Divorced	234	93.98
Single Married	11	4.42
Divorced Single	2	0.80
Widow	2	0.80
LEVEL OF EDUCATION		
No Formal Education	4	1.61
Primary	2	0.80
Secondary	60	24.10
Post secondary.	183	73.49
OCCUPATION		
Self employed	114	45.78
Health worker	66	26.51
Civil servant	44	17.67
House wife	13	5.22
Others	12	4.82

TABLE 2: AWARENESS /KNOWLEDGE OF VASECTOMY IN PORT HARCOURT, NIGERIA

VARIABLE	FREQUENCY (N= 249)	PERCENTAGE (N= 100)
HAVE YOU EVER HEARD OF MALE STERILIZATION(MS)/VASECTOMY		
No	103	41.37
Yes	146	58.63
DO YOU KNOW THE MEANING OF VASECTOMY BEFORE NOW		
No	120	48.19
Yes	129	51.81
HAVE ANY HEALTH WORKER DISCUSS VASECTOMY WITH YOU		
No	139	55.82
Yes	110	44.18
VASECTOMY MEANS MAKING THE PENIS WEAK		
No	212	85.14
Yes	37	14.86
VASECTOMY MEANS TYING/BLOCKING THE PASSAGE OF SPERM		
No	85	34.14
Yes	164	65.86
I DON'T KNOW THE MEANING OF VASECTOMY		
No	166	66.66
Yes	83	33.33

TABLE 3: SUPPORT FOR SPOUSE TO HAVE VASECTOMY DONE IN PORT HARCOURT, NIGERIA

WILL YOU GIVE A GO AHEAD TO YOUR HUSBAND TO DO VASECTOMY FOR CONTRACEPTION IF HE WANTS/DESIRES		
No	141	56.63
Yes	108	43.37
OR DO YOU INSTEAD PREFER TYING YOUR TUBES (BTL) INSTEAD OF ALLOWING YOUR HUSBAND DOING VASECTOMY.		
No	89	35.74
Yes	160	64.26
IF YOU ARE REASSURED BY EXPERTS THAT VASECTOMY IS ACTUALLY A SAFE, CHEAP AND EFFECTIVE MEANS OF CONTRACEPTION:		
WILL YOU GIVE A GO AHEAD TO YOUR HUSBAND TO DO MS FOR CONTRACEPTION IF HE WANTS/DESIRES		
No	114	45.78
Yes	135	54.22
OR DO YOU INSTEAD PREFER TYING YOUR TUBES (BTL) INSTEAD OF ALLOWING YOUR HUSBAND DOING VASECTOMY.		
No	160	64.26
Yes	89	35.74
Total	**249**	**100**

TABLE 4: REASONS FOR NOT WANTING VASECTOMY

VARIABLE	**FREQUENCY (N = 249)**	**PERCENTAGE (N=100)**
PERMANENT METHOD OF CONTRACEPTION	163	30.53
FEAR OF THE OPERATION	110	20.60
AGAINST ONES FAITH	108	20.22
OTHER REASONS	98	18.35
IT CAUSES POOR ERECTION	55	10.30

DISCUSSION

In this study, majority of the participants were of reproductive age group. The about 10% of the respondents who were above 45 years of age reported to the clinic to remove expired long acting reversible contraceptive device. Also in table 1, most of the women had at least secondary education and this apparently made counseling easy, as shown in the number of these women who appreciated that vasectomy is a good contraceptive option when they were reassured on their initial misconceptions on vasectomy.

There was a rising tendency in the knowledge of vasectomy in the studies done in Ethiopia, Turkey and India [11]. The vasectomy awareness in our study is quite high and almost equates that of India. Though a high percentage of the women (83.14%) know vasectomy does not reduce potency, they have average knowledge on it affectation on fertility (table 2). This particular awareness is very important as this is one of the important reasons for not accepting male sterilization in many studies, the Shattuk et al study inclusive. Interestingly in this study, poor potency weighed low (far below the concern that it is permanent method) as a reason for not accepting/supporting vasectomy.

A good percentage (76.79 %, 73.90%) knows vasectomy is a very effective and safe contraceptive method respectively as attested to by various studies [3,10,11,13]. With these high knowledge/information base of this procedure by these women, it is surprising why the below average support for spouse to have vasectomy done in this study. This might not be unconnected with latent fear of possible irreversible damage to a much cherished organ during this procedure. This might be a risk too high to take; however, this procedure is noted to be simple, easy and safe [3,10].

One hundred and forty one (56.63%) of the women will not give consent for their spouse to do vasectomy and 160(64.26%) will rather do a bilateral tubal ligation than allow a vasectomy on

their spouse. However, if they are reassured on their worries on vasectomy, 135 (54. 22%) will give their support for this method of contraception. This brings to bear the role of adequate and sustained counseling in convincing clients to accepting a procedure. Adequate counseling reassures the clients on certain misgivings/ myths/ concerns. This is the exact situation in the case study were the women preferred their doing bilateral tubal ligation instead of consenting to their husband doing vasectomy. The respondents in this study have good knowledge of the subject matter, apparently, all that was needed was a reassuring counseling [9,20] on what they already know; this will cement their awareness, allay their fears and allow them make informed decision.

The reasons adduced for not supporting vasectomy differ in varying degree from the findings in some other studies [3,11,21,22]. These reasons include permanent method (30.53%), fear of surgery (20.60%), against faith (20.22%), and affecting potency (10.30%). It is obvious from this data that while the fear of poor potency post procedure is the main concern of most women in other studies above [3,11], it was not the main concern in this study. Rather, being a permanent method is the main worry here as against Nyengidiki et al finding where vasectomy being a permanent method counted least [20]. The concern in this study is for real; as the procedure being a permanent method is real. This shows the extent to which depth of knowledge and counseling on a procedure can dispel wrong notions held earlier in this centre that the procedure has a damaging effect on potency. It also highlight the need for sustained further counseling of the women in Port Harcourt in particular so that they will see the need to encourage their spouse, as equal stake holders in reproductive health, to accept vasectomy as a good option of contraception and hence spare them the trouble of the numerous disturbing side effects of most female contraceptive methods. Interesting, top on the reasons for accepting spouse vasectomy by antenatal mothers in Nyengidiki et al study in Port Harcourt is to make their husband participate in family planning.

The inequitable gender participation in contraception and reproductive health issues in general is a cause for worry and resulted in the 2015 international conference on family planning with a view to addressing the trend and hence improving on male involvement in both child spacing and limiting[23, 24, 25]. The current global vasectomy versus bilateral tubal ligation proportion of

2.4% to 19% is quite unacceptable [3]. Women support for vasectomy will definitely make the desired difference.

CONCLUSION

The knowledge of vasectomy of women in Port Harcourt is high but there is no commensurate willingness in their supporting this practice. Since reassurance on the women concerns improved their support for the procedure, sustained targeted counseling of these concerns is needed to surmount this obstacle to the much desired practice of vasectomy in this part of the globe.

LIMITATION

As an action research study, the application of the result is limited to the area it was carried out; though it may on the other hand, augments the pool of studies in this area of interest.

RECOMMENDATION

There is need for government policy specifically on aggressive vasectomy counseling program in the various family planning clinics and antenatal clinics among other places. There might be need for some incentives for undergoing vasectomy. For example, both the surgery itself and any post operative drug are made free of charge.

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