



Ascertaining the levels of orgasm during sex among women of reproductive age in South-South Nigeria

K. B. Gbaranor¹, V. I. Ile², N. P. Ogbonda³, P. K. Biral², N. P. Barinua-Gbaranor⁴, A. A. Umar⁵, A. N. Wifa², Y. Ikakita², W. A. Mube⁶, O. Ekeng⁷, M. Odimabo¹, F. Abdussalam⁸, U. A. George⁹

¹Department of Human Physiology, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

²Department of Family Medicine, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

³Department of Public Health Sciences, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

⁴Department of Office and Information Management, Faculty of Administration and Management, Rivers State University, Rivers State, South-South, Nigeria

⁵Department of Community Medicine, Bayero University Kano/Aminu Kano Teaching Hospital, Kano, Kano State, North-West, Nigeria

⁶Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital, Rivers State, South-South, Nigeria

⁷Department of Anaesthesia, Nile University, Abuja, Nigeria

⁸Kano State Primary Health care Board, Kano, Kano State, North-West, Nigeria

⁹Department of Human Physiology, College of Medical Sciences, University of Uyo, Uyo, Akwa Ibom State, Nigeria.

Corresponding author: *Gbaranor, K. B., Department of Human Physiology, College of Medical Science, Rivers State University, Rivers State, South-South, Nigeria
barinua.gbaranor@ust.edu.ng

Abstract

Orgasm is a physiological process in response to sexual activity and it is the peak of sexual pleasure accompany with emotional and physical sensations. In female, attaining orgasm is the peak of their excitation during sexual activity. The aim of this study is to ascertain the levels of orgasm during sex among women of reproductive age in South-South Nigeria. This was a descriptive study involving 250 female of reproductive age who were within the age of 18 to 47 years. A well-structured questionnaire was administered to participants. Each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the Research Assistants. The study lasted for a period of 3 months (June to August, 2024). Exclusion criteria were those women that have not attain reproductive age. Inclusion criteria are women that have once experienced or not experienced orgasms. Data was analyzed with SPSS version 26 and P value < 0.05 was considered significant. The study reveals that 68.00% of the participants have difficulty in reaching orgasm during sex, 68.00% do not experienced orgasm, 68.00% do not re-gain orgasm again after resolution, 66.00% agreed that orgasm encourage them to have sex, 60.00% said orgasm promote bonding with their sexual partner, For stimulating parts: 4.00% is by touching the vagina, 40.00% is by touching clitoris, 40.00% by touching breast nipple, while 40.16.00% is by having sex, 60.00% do not experienced



This work is licensed under Creative Commons Attribution 4.0 License.

lubrication, 60.00% had 1 round of orgasm before resolution, 12.00% had 2 orgasm, 8.00% had 3 orgasm, 20.00% had multiple orgasm.

Keywords:

Ascertaining, Levels, Orgasm, Experience, Reproductive Women.

How to cite: Gbaranor, K. B., Ile, V. I., Ogbonda, N. P., Biralo, P. K., Barinua-Gbaranor, N. P., Umar, A. A., Ikakita, Y., Mube, W. A., Wifa, A. N., Ekeng, O., Odimabo, M., Abdussalam, F., & George, U. A. (2025). Ascertaining the levels of orgasm during sex among women of reproductive age in South-South Nigeria. *GPH-International Journal of Health Sciences and Nursing*, 8(01), 01-09. <https://doi.org/10.5281/zenodo.15173086>

Introduction

Sexuality is a basic need, which represents a fundamental aspect affecting all parts of life of most adult human beings. According to the World Health Organization (2011), a fulfilling sexuality contributes to general health. At the same time, sexual dysfunctions are a widespread phenomenon that impair the quality of life and the relationships of affected people (Khajehei et al., 2015). In Somalia, female sexuality is highly suppressed, with female genital mutilation being a common practice (Meston et al., 2004; UNICEF, 2023). The female orgasm is a complex and multifaceted phenomenon that has been studied across various scientific disciplines. Physiologists x-ray muscle contractions during orgasm, endocrinologists relied on hormonal changes during and after orgasm, neuroscience explains orgasm through neurotransmitters and brain activity, and psychology emphasizes subjective feelings and sensations (Levin, 2019; Meston et al., 2004; Prause, 2011). It is important to acknowledge that the female orgasm is not solely limited to genital stimulation and can be achieved through various methods, such as stimulation of non genital regions. Komisaruk and Whipple (2011) An orgasm in the human female is a variable, transient peak sensation of intense pleasure, creating an altered state of consciousness, usually accompanied by involuntary, rhythmic contractions of the pelvic striated circumvaginal musculature, often with concomitant uterine and anal contractions and myotonia that resolves the sexually induced vasocongestion (sometimes only partially), usually with an induction of well-being and contentment. (Meston et al., 2004: 785). G-spot refers to a purported erotically sensitive area, said to be located in the pelvic urethra and accessible through the anterior wall of the vagina (Puppo & Puppo, 2014). The onset of the female orgasmic response is characterized by strong rhythmic contractions of the outer third of the vagina, lasting for 5–8 s with intervals of less than 1 s, gradually weakening and becoming longer (Redelman, 2017). The female body experiences a range of physiological changes during sexual arousal and orgasm (which are not necessarily exclusive to them), including increased heart rate and respiration, relaxation of the genital and pelvic musculature, and release of hormones such as prolactin and oxytocin (Meston et al., 2004; Mintz, 2017; Pavličev & Wagner, 2016). Female orgasms are influenced by a wide range of biopsychosocial variables, including the type of stimulation, partner presence or absence, partner abilities, type of relationship, communication, emotional intimacy, a positive body image, and self-esteem, level of fatigue, use of antidepressant medications, and others (Arias-Castillo et al., 2022; Redelman, 2017). There is also evidence of a genetic component to the ability to experience orgasm, with the heritability of orgasm

through sexual intercourse estimated at 34% and orgasm during masturbation estimated at 45% (Brody, 2017). Clitoral stimulation is a highly sensitive and pleasurable experience for many women; however, it is important to note that the clitoris is not the sole source of sexual arousal and orgasm for women. Women can experience orgasm through a variety of genital and non-genital stimulation, including the clitoris, anterior vaginal wall, breasts, and nipples, as well as through mental stimulation, such as erotic thoughts, fantasies, mental imagery, hypnosis, or even through the enjoyment of certain types of food (Meston et al., 2004; Pfaus et al., 2016a). The main function of foreplay is to prepare the female body for sexual activity and increase the likelihood of pleasure and orgasm. It can be performed through several behaviors, such as kissing, touching, caressing, and oral sex, which stimulates nerve endings in the skin, especially around the erogenous zones, such as the breasts and clitoris. These actions trigger the release of hormones like oxytocin, which promote bonding and relaxation. They can also trigger vaginal lubrication and increase blood flow to the genital area, causing engorgement of the clitoris and vulva. The increased blood flow and lubrication can make sexual intercourse more comfortable and pleasurable, increasing the likelihood of orgasm (Caio, et al, 2023). Orgasms release endorphins, which are natural painkillers that can help alleviate physical pain, reduce stress, and promote feelings of relaxation and well-being (Redelman, 2017). The release of oxytocin during orgasm can promote bonding and social connection, as well as reduce anxiety and depression (Redelman, 2017). Orgasms have also been associated with a range of physiological benefits, including increased blood flow, improved immune function, and enhanced cardiovascular health. Orgasm is necessary for women to dissipate pelvic vasocongestion resulting from the excitatory process and can reduce the effects of chronic pelvic vasocongestion (Meston et al., 2004). Regular orgasms have been linked to a lower risk of certain diseases, such as breast cancer and endometriosis, as well as improved fertility and menstrual health, and may be associated with a longer lifespan (Redelman, 2017). Orgasms can have positive effects on mental health, including improved mood, self-esteem, and body image (Caio, et al, 2023). The absence of orgasm, known as anorgasmia, is a significant source of psychological distress for many women (American Psychiatric Association, 2022; Redelman, 2017).

Materials and Method

This was a cross-sectional study involving 250 married women who were within the age of 18 to 47 years. A well-structured questionnaire was administered to participants. Each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the Research Assistants. The study lasted for a period of 3 months (June to August, 2024). Statistical analysis of data was done using SPSS Version 25 and P value < 0.05 was considered significant for data.

Exclusion criteria: Exclusion criteria were those women that have not attained reproductive age.

Inclusion criteria: Inclusion criteria are women that have once experienced or not experienced orgasms.

Area of the Study

The study was carried out in the South-South Geopolitical Zone in Nigeria. The South-South geopolitical zone is located in the Southern part of Nigeria. It comprises six states – Akwa Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers.

Population of the Study

The target population of this study consisted of females in rural areas of the South-South Geopolitical Zone in Nigeria.

Results

The results gathered from the participants shows that 68.00% have difficult to reach orgasm (Table 1). The research revealed that 68.00% of the participants do not experience orgasm (Table 2). The results shows that 60.00% of the participants enjoy and are happy if they eventually reach orgasm (Table 3). The results of the responses elicited by participants on how they get to orgasm shows that, 60.00% get to orgasm by stimulation while 40.00% is by non-stimulation (Table 4). The results shows that participants attain orgasm through the stimulation of the following parts of their body: 4.00% is by touching the vagina, 40.00% by touching the clitoris, 40.00% by touching breast nipple, and 16.00% is by having sex (Table 5). The study shows that 60.00% of the participants experienced lubrication before orgasm (Table 6). The results of the responses shows that 60.00% had 1 orgasm in a single round sex, 12.00% had 2 orgasms, 8.00% had 3 orgasms while 20.00% had multiple orgasms (Table 7), 68.00% of the participants do not re-gain orgasm after resolution, 66.00% said orgasm encourage them to have sex and 60.00% said orgasm promote bonding with their sexual partner.

Table 1: Participants who difficulty in reaching orgasm during sex

Response	Frequency	Percentage (%)
Participants who have difficulty in reaching orgasm	170	68.00
Participants who do not have difficulty in reaching orgasm	80	32.00
Total	250	100.0

Table 2: Participants who do not experience orgasm during sex

Response	Frequency	Percentage (%)
Participants who experienced orgasm	80	32.00
Participants who do	170	68.00

not experienced orgasm		
Total	250	100.0

Table 3: Participants who feel joy or angry after orgasm

Response	Frequency	Percentage (%)
Participants who feel joy after orgasm	150	60.00
Participants who do not feel joy after orgasm	100	40.00
Total	250	100.0

Table 4: Participants who get to orgasm

Response	Frequency	Percentage (%)
By stimulation	340	97.14
By non-stimulation	10	2.86
Total	350	100.0

Table 5: Part of the body when stimulated allow the participants to attain orgasm

Response	Frequency	Percentage (%)
By stimulating the vagina	10	4.00
By touching clitoris	100	40.00
By touching the breast nipple	100	40.00
By having sex	40	16.00
Total	250	100.0

Table 6: Participants who experience lubrication before orgasm

Response	Frequency	Percentage (%)
Participants who experienced lubrication before	150	60.00

orgasm		
Participants who do not experienced lubrication before orgasm	100	40.00
Total	350	100.0

Table 7: Numbers of orgasm in a single round sex

Response	Frequency	Percentage (%)
1 orgasm	150	60.00
2 orgasm	30	12.00
3 orgasm	20	8.00
Multiple orgasm	50	20.00
Total	250	100.0

Discussion

Orgasm is a physiological process in response to sexual activity and it is the peak of sexual pleasure accompany with emotional and physical sensations. In female, attaining orgasm is the peak of their excitation during sexual activity. During orgasm, there will be increase in heart rate, release of oxytocin (hormones) that may bring in the feelings of bonding and relaxation between the sexual partners. Orgasm promotes bonding between sexual partners. Orgasm occurs as a series of rhythmic muscle contractions in the pelvic regions. During sexual activity, some ladies may struggle to achieve orgasm whereas some may have several orgasms in a single sexual activity. Medical, physical and psychological factors determine the levels at which a woman reach orgasm. Communication with your sexual partner and key in your body play a role in enhancing sexual pleasure and attaining orgasm.

The study reveals that 68.00% of the participants have difficulty in reaching orgasm during sex and this may due to low libido (sexual desire),lack of arousal, medical factors such as diabetes, cardiovascular disease, halitosis in partner and socio-economic factors such as unemployment, unemployment, financial problems and being single. Also, it could be due to psychological factors such as relationship failure, anxiety, Isolation, depression, personal problems, and stress. It is very clear that when you are facing any of the factors mentioned earlier, it reduces your desire for love making and as such orgasm can not be achieved despite been aroused. Again, 68% of the participants do not experience orgasm during sexual display and this shows that women facing lack of orgasm is on the increase. This rising trend in women with lack of orgasm could be attributed to certain factors like medical, psychological and socioeconomic. The study also revealed that 68.00% of the participants do not re-gain orgasm after resolution and this could be that the physical stimuli to different regions of the body like the physical stimuli of different regions of the body such as the breasts and nipple,

clitoris, vagina, and mons are not enough to elicit orgasm. It could also be due to certain physiological and psychological factors. These physiological factors are the release of prolactin, vaginal, anal sphincter, and uterine contractions. This implies that there may not be enough contractions of these parts after the resolution of the first sexual activity. It could be that psychological factors such as relationship failure, anxiety, Isolation, depression, personal problems, and stress set in after the first sexual encounter and this could affect orgasm.

Furthermore, majority of the participants (66.00%) agreed that orgasm encourage them to have multiple sex and this implies that during sexual activity with attainment of orgasm, there physiological, psychological and social status are at the peak. Also, because orgasm encourage them to have multiple sex, therefore attaining orgasm may lead to sexual satisfaction. Again, majority (60.00%) of the participants said orgasm promote bonding between them and their sexual partner. At the peak of orgasm, different sounds and display of excitement and sensation of intense pleasure occur thus, inducing physical, social and mental well-being leading to sexual satisfaction. The study shows that 60.00% of the participants are happy and enjoyed attainment of orgasm during sexual activity.

The research also shows that majority (60.00%) of the participants attained orgasm by stimulation while 40.00% attain orgasm by non-stimulation. Again, the study shows that participants attain orgasm through sexual arousal or stimulation of different parts of their body and 4.00% attained orgasm by vagina stimulation, 40.00% attained orgasm by touching their clitoris, 40.00% attained orgasm by touching their breasts and nipple, and 16.00% attained orgasm through sexual intercourse. Several (60.00%) of the participants experienced lubrication during sexual arousal and thus attain orgasm. Also, the research revealed that 60.00% of the participants had 1 orgasm in a single round sex, 12.00% had 2 orgasms, 8.00% had 3 orgasms while 20.00% had multiple orgasms. This implies that for orgasm to take place, certain factors such as physical, physiological, psychological and socioeconomic must be well placed to usher in sexual receptivity.

Orgasm is a natural and physiological phenomenon that occur in a female a careful, gentle and systematic stimulation of various parts of the body independently or simultaneously creating a sensation of intense pleasure. At the peak of orgasm, there is a creation of temporally altered state of consciousness. For orgasm to occur, the physiological, morphological, biochemical and psychological state of the person must be normal and following adequate, careful, gentle and consistent stimulation of the various parts of the body.

Conclusion

Orgasm is a physiological process in response to sexual activity and it is the peak of sexual pleasure accompany with emotional and physical sensations. The study revealed that majority (68%) of the participants do not experience orgasm during sexual display and this shows that women facing lack of orgasm is on the increase. This rising trend in women with lack of orgasm could be attributed to certain factors like medical, psychological and socioeconomic.

Acknowledgments

We acknowledge Nazor Barinua-Gbaranor, Nuazor Victory Barinua, Kedumle Success Barinua, Tuamene Excellent Barinua and Excellent Support Global Foundation for their moral support, prayers, understanding, and encouragement during the period of this research.

Funding: No funding

Conflict of Interest: None declared

Ethical Approval: Not required

References

- Arias-Castillo, L., García, L., & García-Perdomo, H. A. (2022). The complexity of female orgasm and ejaculation. *Archives of Gynecology and Obstetrics*. <https://doi.org/10.1007/s00404-022-06810-y>
- Brody, S. (2017). Evaluation of female orgasmic disorder. In W. W. IsHak (Ed.), *The textbook of clinical sexual medicine* (pp. 203–218). Springer International Publishing. https://doi.org/10.1007/978-3-319-52539-6_14
- Caio Santos Alves da Silva, Anthonieta Looman Mafra, Jaroslava Varella Valentova (2023). *Female Orgasm*.
- Khajehei, M., Doherty, M., & Tilley, P. J. M. M. (2015). An update on sexual function and dysfunction in women. *Archives of Women's Mental Health*, 18, 423–433. <https://doi.org/10.1007/s00737-015-0535-y>
- Levin, R. J. (2019). The clitoris— An appraisal of its reproductive function during the fertile years: Why was it, and still is, overlooked in accounts of female sexual arousal. *Clinical Anatomy*, 33(1), 136–145. <https://doi.org/10.1002/ca.23498>
- Meston, C. M., Levin, R. J., Sipski, M. L., Hull, E. M., & Heiman, J. R. (2004). Women's orgasm. *Annual Review of Sex Research*, 15(February), 173–257. <https://doi.org/10.1080/10532528.2004.10559820>
- Mintz, D. L. (2017). *Becoming Cliterate: Why orgasm equality matters and how to get it* (Illustrated edition). HarperOne.
- Pavličev, M., & Wagner, G. (2016). The evolutionary origin of female orgasm. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution*, 326(6), 326–337. <https://doi.org/10.1002/jez.b.22690>
- Pfaus, J. G., Quintana, G. R., Mac Cionnaith, C., & Parada, M. (2016a). The whole versus the sum of some of the parts: Toward resolving the apparent controversy of clitoral versus vaginal orgasms. *Socioaffective Neuroscience & Psychology*, 6(1), 32578. <https://doi.org/10.3402/snp.v6.32578>
- Prause, N. (2011). The human female orgasm: Critical evaluations of proposed psychological sequelae. *Sexual and Relationship Therapy*, 26(4), 315–328. <https://doi.org/10.1080/14681994.2011.651452>
- Puppo, V., & Puppo, G. (2014). Anatomy of sex: Revision of the new anatomical terms used for the clitoris and the female orgasm by sexologists. *Clinical Anatomy*, 28(3), 293–304. <https://doi.org/10.1002/ca.22471>

Redelman, M. (2017). Treatment of female orgasmic disorder. In W. W. IsHak (Ed.), *The textbook of clinical sexual medicine* (pp. 219–240). Springer International Publishing. https://doi.org/10.1007/978-3-319-52539-6_15

UNICEF. (2023, February). Female Genital Mutilation (FGM) Statistics [Data Bank]. <https://data.unicef.org/topic/child-protection/female-genital-mutilation/>

Whipple, B., & Graziottin, A. (2011). Orgasmic disorders in women. In *Standard practice in sexual medicine* (pp. 334–341). Wiley. <https://doi.org/10.1002/9780470755235.ch24>

World Health Organization. (2011). Sexual health throughout life. <http://www.euro.who.int/en/health-topics/Life-stages/sexual-and-reproductive-health/news/news/2011/06/sexual-health-throughout-life>.