

Perceived Psychological and Organic Factors Responsible For Erectile Dysfunction among Male Adults in Ogbomoso South Local Government Area

¹Onifade, O. A.(Ph.D.), ²Ruth Adio-Moses (Ph.D.), ¹Ologele, I. (Ph.D.), ¹Adigun, J. O. (M.Ed.), ¹Ogungboye, R. O. (M.Ed.) and ¹Abikoye, A. I. (M.Ed.)

¹Department of Health Promotion and Environmental Health Education, University Of Ilorin

²Department of Human Kinetics and Health Education, University Of Ibadan

Abstract- This paper was an investigation into the perceived psychological and organic factors contributing to erectile dysfunction among male adults in Ogbomoso South Local Government Area. A sampled population of three hundred and twenty (320) constituted respondents for the study. A self-structured questionnaire that was validated by four experts in the field of Human sexuality. A reliability coefficient of .85r was obtained using test-retest method of reliability. Descriptive research survey was adopted for the study. In all, two hypotheses were formulated and tested at 0.05 alpha level. Data collected were analyzed by the use of Chi-square (X²) statistics. The result of the study showed that psychological factors were perceived as significant factor responsible for erectile dysfunction and organic factors were also perceived as significant factors responsible for impotence. Based on the findings of the study, the researcher recommends that men should feel free to explain their emotional feelings to their love partners and couples are advised to embark on periodic medical check-up.

Index Terms- erectile dysfunction, psychological factors, organic factors.

I. INTRODUCTION

Erectile dysfunction (ED) is defined as the inability of the male to achieve an erect penis for sufficient sexual intercourse as part of an overall multifaceted process of male sexual function (Segraves, 2010). Montague, Jarow and Broderick (2005) described erectile dysfunction (ED) or impotence as sexual dysfunction characterized by the inability to develop or maintain an erection of the penis during sexual performance. A penile erection is the hydraulic effect of blood entering and being retained in sponge-like bodies within the penis. The process is often initiated when signals are transmitted from the brain to nerves in the penis (Schouten, Bohnen, Groenveld, Dohle, Thomas and Bosch, 2010).

Erectile dysfunction is considered a benign condition, yet it has a negative impact on quality of life, self-esteem and social functioning. An estimated 30 million men in the United States alone suffer from ED (Berrada, Kadri, Mechakra-Tahir and Nejjari, 2003). In a study conducted in the United Kingdom on 109 men, 16-65years of age, 32 percent reported inability to achieve an erection and 20 percent were unable to maintain an erection long enough for intercourse for a variety of reasons

(Guay, 2001). Kubin, Wagner and Fugi-Meyer (2003) observed that in 1989 in Massachusetts, USA that prevalence of ED was 52% in men 40 to 70 years old.

In some African, Arabic or Islamic countries with socio cultural and religious characteristics similar to those in Morocco, ED was found to be quite prevalent: Egypt (54.9 percent), Nigeria (50.7 percent) and Turkey, (64.3 percent). Moreover, a positive correlation between ED and age was noted in those countries. In Morocco, the current life expectancy is about 68.8years and approximately 7 percent of the population is aged 60 and older (Berrada, Kadri, Mechakra-Tahiri and Nejjari, 2003).

The aetiology of erectile dysfunction could be psychological, organic or of mixed aetiology with both factors (Costa, Avances and Wagner, 2003). The psychological factors include sexual performance anxiety, depression, bereavement, tiredness and stress (Segraves, 2010). The organic causes are common in older men with chronic diseases like diabetes mellitus, hypertension and arteriosclerosis (Elbendary, El-Gamal and Salem, 2009).

Delgado, Brannan, Mallinckrodt, Tran, McNamara, Wang, Watkin and Detke, (2005) observed that drugs (such as anti-depressants and nicotine are most common), neurogenic disorders, cavernosal disorders (peyronie's disease), psychological causes: performance anxiety, stress, mental disorders (Tom, and Lue, 2006) psychological problems, negative feelings, surgery, aging, kidney failure, diseases such as diabetes and multiple sclerosis (MS), lifestyle such as smoking which is a key cause of erectile dysfunction (Peate, 2005). Smoking causes impotence because it promotes arterial narrowing (Kendirci, Nowfar and Hellstron, 2005).

Erectile dysfunction can also be associated with bicycling due to both neurological and vascular problems due to compression (Sommer, Goldstein and Korda, 2010). The increase risk appears to be about 1.7 fold (Hung, Munarriz and Goldstein, 2005).

Shyness, ignorance and reluctance to confide private matters to the physicians often prevent most couples from seeking medical help (Laumann, Glasser, Neves and Moreira, 2009). Generally, erectile dysfunction is considered a benign condition. However, it has significant effects on the quality of sexual life of both the patients and their partners leading to marital discord and even marital violence (Balon, 2008). This is because sexual function had been shown to be a high priority for men and their partners throughout their life span (Dann, 2004). Loss of sexual

harmony reduces the quality of life men and their partners (Fatusi, Ijaduola and Ojofeitimi, 2003).

Erectile dysfunction is an important public health problem with a high misconception rate (Fatusi Ijaduola and Ojofeitimi, 2003). Most studies in the prevalence of ED in Nigeria were community based since chronic medical illnesses are becoming increasingly prevalent in our setting, a clinic based study of ED among men who have demonstrated a health-seeking behaviour and present with non-ED related problems would help physicians appreciate the magnitude and correlate of ED (Lawrence, Olubunmi, Olapade, Modupe and Eme, 2012).

Exercise, particularly aerobic exercise is an effective treatment for erectile dysfunction. When pharmacological methods fail, a purpose-designed external vacuum pump can be used to attain erection, with a separate compression ring fitted to the penis to maintain it (John and Muhall, 2008). These pumps should be distinguished from other penis pumps (supplied without compression rings) which, rather than being used for temporary treatment of impotence are claimed to increase penis length if used frequently or vibrates as an aid to masturbation. More drastically, inflatable or rigid penile implants may be fitted surgically (Gryniewicz, Reepmeyer, Kallffman and Bushe, 2009).

II. RESEARCH HYPOTHESES

1. Psychological factor is not perceived as a significant factor contributing to erectile dysfunction among male adults in Ogbomoso South Local Government Area.
2. Organic factor is not perceived as a significant factor contributing to erectile dysfunction among male adults in Ogbomoso South Local Government Area.

III. METHODOLOGY

The study was carried out with the use of descriptive survey method. The study population comprises of all male adults in Ogbomoso South Local Government Area. Five (5) wards were randomly selected for the study with the estimated population of one thousand and six hundred (1,600). Based on the population, a sample of three hundred and twenty (320) (representing 20 percent of the estimated population) was drawn with the use of stratified random sampling technique.

A self-structured questionnaire that had been thoroughly validated by three experts in the field of human sexuality was instrument used for this study. A reliability coefficient of 0.85r was obtained through the use of test-retest method of reliability. Two research hypotheses were formulated and tested with the use of chi-square (X^2) statistics. The result of the analysis and interpretation of data collected for the study were tabulated and explained below;

Results and Discussion

The results of the analyses are tabulated below;

Hypothesis 1: Psychological factor is not perceived as a significant factor contributing to erectile dysfunction among male adults in Ogbomoso South Local Government Area.

Table 1: Chi-square (X^2) analysis showing perception of psychological factor on erectile dysfunction

S/N	ITEM	SA	A	D	SD	Row total	Cal X^2	Df	Crit. Value	Rem.
1	Death of beloved may result to poor penile erection	200 (62.5%)	90 (28.1%)	19 (6.0%)	11 (3.4%)	320	90.4	12	21.03	HO Rejected
2	Tiredness reduces penile erection	250 (78.1%)	60 (18.8%)	6 (1.9%)	4 (1.2%)	320				
3	Sexual performance anxiety may lead to erectile dysfunction	190 (59.3%)	95 (29.7%)	20 (6.3%)	15 (4.7%)	320				
4	Depression may causes penile erection	255 (79.7%)	40 (12.5%)	19 (5.9%)	6 (1.9%)	320				
5	Excessive stress may cause erectile dysfunction	269 (84.1%)	40 (12.5%)	8 (2.5%)	3 (0.9%)	320				
	Column Total	1164	325	72	39	1600				

The findings from the analysis of table one (1) above shows that calculated chi-square (X^2) value of 90.4 against the critical value of 21.0 at 0.05 alpha level of significance with degree of freedom (df) of 12. Thus, the calculated X^2 value (90.4) is greater

than the critical value (21.03). Hence, the above stated hypothesis is hereby rejected. This means that psychological problems may result into impotence.

Hypothesis 2: Organic factor is not perceived as a significant factor contributing to erectile dysfunction among male adults in Ogbomosho South Local Government Area

Table 2: Chi-square (X^2) analysis showing perception of organic factor on erectile dysfunction.

	ITEM	SA	A	D	SD	Row total	Cal X^2	Df	Crit. Value	Rem.
1	Diabetes mellitus may result to poor penile erection	141 (44.1%)	159 (49.7%)	11 (3.4%)	9 (2.8%)	320	184.3	12	21.03	HO Rejected
2	Aging is characterized with low penile erection	251 (78.7%)	57 (17.8%)	8 (2.5%)	4 (1.3%)	320				
3	Arteriosclerosis may result to impotence	267 (83.4%)	41 (12.8%)	7 (2.2%)	5 (1.6%)	320				
4	Cardiovascular disorders affect blood flow thereby reduce the ability to form an erection	187 (58.5%)	105 (32.8%)	19 (5.9%)	9 (2.8%)	320				
5	Hypertension is characterized with low penile erection	255 (79.7%)	60 (18.8%)	3 (0.9%)	2 (0.6%)	320				
	Column Total	1101	422	48	29	1600				

The finding from analysis in the table two (2) above shows calculated chi-square (X^2) of 184.3 against the critical value of 21.03 at 0.05 alpha level of significance with degree of freedom (df) of 12. Since the calculated value is greater than the critical value, the above hypothesis is hereby rejected. This means that organic disorders can lead to erectile dysfunction.

IV. DISCUSSION OF FINDINGS

Table 1 revealed that psychological factor was perceived as a significant factor responsible for erectile dysfunction among male adults. This finding is in accordance with Segraves (2010) that sexual performance anxiety; depression, bereavement, tiredness and stress can cause erectile dysfunction. This result also confirmed the finding of Peate (2005) who observed that negative feeling and mental disorders may lead to poor penile erection.

Finally, table two (2) revealed that organic factor was perceived as a significant factor responsible for erectile dysfunction among male adults. This was justified by the assertions of Elbendary, El-Gamal and Saleri (2009) that organic causes of erectile dysfunction are common in older men with chronic diseases like diabetes mellitus, hypertension and arteriosclerosis. Peate (2005) added that aging, kidney failure and multiple sclerosis can result to erectile dysfunction.

V. CONCLUSION

Based on the findings from the analysis of the tested hypothesis, the following conclusion were drawn

1. Psychological problems like sexual performance anxiety, depression, bereavement may result into impotence

2. Organic disorders such as chronic diseases like diabetes mellitus, hypertension and arteriosclerosis can lead to erectile dysfunction

VI. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. Men are encouraged to feel free to explain their emotional feelings to their love partners.
2. Couples are advised to embark on periodic medical check-up.

REFERENCES

- [1] Balon, R. (2008). Sexual dysfunction. The brain-body connection. *Adv.psychosom Med. Basel*, 29, 1-6.
- [2] Berrada, S., Kadri, N., Mechakra-Tahiri & Nejari, C. (2003). Prevalence of erectile dysfunction and its correlates: a population-based study in Morocco. *International Journal of Impotence*, 15:41-46.
- [3] Costa, P., Avances C., & Wagner, L. (2003). Erectile dysfunction: knowledge, wishes and attitude. Results of a French study of 5,099 men aged 17-70 years. *Prog Urology*, 13(1), 85-91. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12703359>
- [4] Delgado, P. L., Brannan, S. K., Mallinckrodt, C. H., Tran, P. V., McNamara, R. K., Wang, F., Watkin, J. G. & Detke, M. J. (2005). Sexual functioning assessed in 4 double-blind placebo and paroxetine-controlled trials of duloxetine for major depressive disorder. *Journal of Clinical psychiatry*, 66 (6): 686-692.
- [5] Dunn, M. E. (2004). Restoration of couple's intimacy and relationship vital to re-establishing erectile function. *Journal of Americal Osteopath. Association*. 104 (3), 6-10.
- [6] Elbendary, M. El-Gamal, O., & Salem, K. (2009). Analysis of risk factors for organic erectile dysfunction in Egyptian patients under the age of 40years. *Journal of Andrology*, 30,5.
- [7] Fatusi, A. O., Ijaduola, K. T., & Ojofeitimi, E. O. (2003). Assessment of andropause awareness and erectile dysfunction among men in Ile-Ife, Nigeria. *Aging male*, 6 (2): 79-85.

- [8] Gryniewicz, C. M., Reepmeyer, J. C., Kauffman, J. F. & Buhse, L. F. (2009). Detection of undeclared erectile dysfunction drugs and analyses in dietary supplements by ion mobility spectrometry. *Journal of Pharmaceutical and Biomedical Analysis*, 49(3):601-606.
- [9] Guay, A. T. (2001). Sexual dysfunction in the diabetic patient. *International Journal of Impotence*, 13:547-550
- [10] Huang, V., Munoriz, B. & Goldstein I. (2005). Bicycle riding and erectile dysfunction. *Journal of sex medicine*, 2 (5):596-604.
- [11] John, P. & Mulhall, M. D. (2008). *Saving your sex life. A guide for men with prostate cancer*, Chicago, Hilton Publishing company.
- [12] Kendira, M., Nowfor, S. & Hellstrom, W. J. (2005). Impact of vascular risk factors on erectile dysfunction. *Drugs Today (Barc)* 41(1):65-74.
- [13] Kubin, M., Wagner, G., Fugi-Meyer, A. R. (2003). Epidemiology of erectile dysfunction. *International Journal of Impotence*, 15:63-71.
- [14] Laumann, E. O., Glasser, D. B., Neves, R. C., & Moreira, E. D. (2009). GSSAB Investigator's Group. A population-based survey of sexual activity, sexual problems and associated help-seeking behaviour patterns in mature adults in the United States of America. *International Journal of Impotence*, 21(3): 71-78.
- [15] Lawrence, A. A., Olubunmi, E. O., Modupe, M. L. & Eme, T. O. (2012). Prevalence and correlates of erectile dysfunction among primary care clinic attendees in Nigeria. Retrieved from <http://www.doi.org/org/10.5539/gjhs.v4n4p107>.
- [16] Montague, D. K., Jorow, J. P., & Broderick, G. A. (2005). Management of erectile dysfunction. *sJournal of Urology*. 174(1):230-234.
- [17] Peate, L. (2005). Effects of smoking on the reproductive health of men. *British Journal of Nursing*, 14 (7): 362-371.
- [18] Schouten, B. W., Bohnen, A. M., Groeneveld, F.P., Dohle, G. R., Thomas, S. & Besch, J. J. (2010). Erectile dysfunction in the community. *Journal of Sex Medicine*, 7(7): 47-53.
- [19] Segraves, R. T. (2010). Considerations for diagnostic criteria for erectile dysfunction in DSM-V. *Journal of Sexual Medicine*, 7, 54-71.
- [20] Sommer, F. Golstein, I. & Korda, J. B. (2010). Bicycle riding and erectile dysfunction. *Journal sex medicine* 7(7):46-58.
- [21] Tom, F. & Lue, M. D. (2006). Causes of erectile dysfunction. *American Health Network*. Retrieved on July 10th, 2007.

AUTHORS

First Author – Onifade, O. A.(Ph.D.), Department of Health Promotion And Environmental Health Education, University of Ilorin

Second Author – Ruth Adio-Moses (Ph.D.), Department Of Human Kinetics And Health Education, University Of Ibadan

Third Author – Ologele, I. (Ph.D.), Department of Health Promotion And Environmental Health Education, University of Ilorin

Fourth Author – Adigun, J. O. (M.Ed.), Department of Health Promotion And Environmental Health Education, University of Ilorin

Fifth Author – Adigun, J. O. (M.Ed.), Department of Health Promotion And Environmental Health Education, University of Ilorin

Sixth Author – Adigun, J. O. (M.Ed.), Department of Health Promotion And Environmental Health Education, University of Ilorin

Corresponding e-mail address: adigunjoseph12@gmail.com