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Research Paper

Assessment of the Prevalence and Attitude of Men with Erectile Dysfunction and Associated Factors in Aba – South Eastern Nigeria.

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ABSTRACT
Erectile dysfunction is one of the most common sexual disorders in men worldwide.
In Nigeria, due to the increasing incidence of cardiovascular diseases and other co-morbidities, the incidence appears to be on the increase. However, it is under reported because of the stigma attached to it.
The aim of this study was to evaluate the prevalence and the attitude of afflicted men and associated factors of erectile dysfunction among men attending outpatient clinics of busy health centers in the metropolis.
The study was cross sectional in design involving the use of structured questionnaires to men attending outpatient clinics.
A total of 550 questionnaires were given out with only 450 completed and returned. Out of the 450 completed questionnaires, only 235 had some degree of erectile dysfunction, giving a prevalence rate of 52.2%.
Of the 235 people with erectile dysfunction (ED), the mean age was 75 years, while the age range was 20 – 91 years.
The 71 – 80 Age Group had the highest number of 71 (30.21%) while the 91 – 100 Age Group had the least number of 5 (2.13%).
ED was found in all educational levels.
Of these 235 men, 160 (68.09%) were married to one wife, 65 (27.66%) were married to more than one wife while only 10 (4.28%) were unmarried.
Difficulty in erection was the most common form of sexual dysfunction seen in 144 men (61.28%) while absence of orgasm was the least with 1 man (.43%).
Hypertension was the most common associated disease seen in 70 men (29.7%).
Alcohol consumption was the most common social habit seen in 115 men (48.94%).
Medical treatment was the most common source of treatment seen in 115 men (48.94%).
Spouses of afflicted men had greater degree of bother than the afflicted men.

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Mild ED was the most common degree of ED seen in 95 men (40.43%).
Erectile Dysfunction is a common sexual disorder in Aba.
Keywords: *Erectile Dysfunction, Prevalence, Attitude, Associated Factors, and Aba.*

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I. INTRODUCTION

Erectile dysfunction is defined as the persistent inability to achieve and maintain an erection sufficient to achieve a satisfactory sexual intercourse.

Erectile dysfunction (ED) is one of the most common sexual disorders in men worldwide. In Nigeria and other African countries, ED is underreported as patients are reluctant to present for treatment due to the stigma attached to it.

ED causes may be multi-factorial but it is generally categorized into two:
- Psychogenic ED
- Organic ED

Organic causes of ED include:
- Heart diseases
- Atherosclerosis
- Hypercholesteraemia
- Hypertension
- Diabetes mellitus
- Obesity
- Metabolic syndrome
- Parkinson’s disease
- Multiple sclerosis
- Certain medications
- Tobacco use
- Pyronies disease
- Alcoholism and other forms of substance abuse
- Pelvic surgeries
- Treatment of prostate diseases, especially prostate cancer
- Penile fracture
- Low serum testosterone level
- Spinal stenosis
- Trauma to the spine

Causes of Psychogenic ED include:
- Depression and anxiety state
- Stress both emotional and physical
- Relationship problems or marital conflicts

Common medications found to be associated with ED include:
- Antidepressants
- Anxiolytics
- Some hypertensive medications
- Diuretics
- Antihistamines
- Chemotherapeutic agents
- Radiation therapy
- Prostate cancer drugs

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- Parkinson's disease drugs
- Antiarrythmic drugs
- Anticonvulsants
- Muscle relaxants

Other substances that have additional potential and can cause ED include:
- Alcohol
- Amphetamines
- Barbiturates
- Cocaine
- Cannabis
- Methadone
- Nicotine
- Opiods

Alcohol affects the sex centres in the brain and its chronic use can cause substantial damage to blood vessels and nerves, whereas smoking causes vasoconstriction, reducing blood flow to penile vasculature. Smoking also increases the chance of developing:
- Atherosclerosis
- Heart diseases
- High blood pressure
- Diabetes mellitus

ED primarily involves:
(1) Majorly the vascular systems and nervous systems.
(2) Hormonal balance, especially testosterone and thyroid.
Therefore, diseases affecting these systems have some capacity to cause ED.

There exists an association between age and ED as cardiovascular risk factors are associated with increasing age. Erection is primarily a vascular event and so may be impaired by degenerative changes in the vascular endothelium.

ED has a negative impact in men's health, often leading to poor quality of life. Outcomes of these include:
- Anxiety
- Depression
- Low self esteem
- Marital conflicts
- Infidelity of spouse
- Infertility

Symptoms of erectile dysfunction include:
- Difficulty in achieving erection
- Difficulty in sustaining erection
- Reduced sexual drive or libido.

Objective evaluation of the grade of ED is by the use of International Index of Erectile Function - version 15 and version 5.

IIEF – 5 (Version 5) is the abridged 5 Item Version and is more popular. Sexual Domain Functions measured by IIEF – 5 include:
- Erectile function
- Orgasmic function
- Sexual desire
- Intercourse satisfaction
- Overall satisfaction

ED severity is categorized into five (5) based on the IIEF – 5:

No ED	–	score of 22 to 25
Mild ED	-	Score of 17 to 21
Mild to Moderate ED	-	Score of 12 to 16
Moderate ED	-	Score of 8 – 11
While Severe ED	-	Score of 5 – 7

ED has now been seen as a forerunner of cardiovascular diseases and requires both comprehensive cardiovascular and urologic evaluations.

METHODOLOGY

The study was cross sectional in design and carried out among adult males attending outpatient clinics and some health institutions within the metropolis.

The study involved the use of structured questionnaires written in English language and given out by doctors to males who completed and returned them.

Those with difficulty completing the questionnaires due to low literate level were aided by the Doctors. A total of 550 questionnaires were given out but only 450 were completed and returned. And out of these, only 235 were found to have some degree of erectile dysfunction (ED).

The questionnaires contained questions and information on demographic variables, educational status, marital status, pattern of erectile dysfunction, associated co-morbidities, social habits, sources of treatment, degree of bother of patients and spouses and items of International Index of Erectile Function – 5.

Data from the completed questionnaires were collated, analyzed and interpreted.

INCLUSION CRITERIA:

Adult males from 20 years of age and above

EXCLUSION CRITERIA:

Adults males below 20 years of age were excluded from the study.

II. RESULTS

TABLE 1: SHOWING DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS (n = 235)

S/NO	VARIABLE AGE IN YEARS	OUTCOME
1	MEAN	
2	RANGE	20 - 91

TABLE 2: SHOWING THE AGE GROUP CHARACTERISTICS OF THE PARTICIPANTS (n = 235)

S/NO	AGE RANGE (IN YEARS)	NUMBER	PERCENTAGE
1	20 – 30	10	4.26%
2	31 – 40	12	5.10%
3	41 – 50	24	10.21%
4	51 – 60	30	12.77%
5	61 - 70	60	25.53%
6	71 – 80	71	30.21%
7	81 – 90	23	9.78%
8	91 – 100	5	2.13%
	n = 235	235	100%

TABLE 3: SHOWING EDUCATIONAL STATUS OF PARTICIPANTS

S/NO	EDUCATIONAL STATUS	NUMBER	PERCENTAGE
1	PRIMARY LEVEL AND BELOW	85	36.17%
2	POST PRIMARY	90	38.29%
3	POST SECONDARY	60	25.53%
	TOTAL	235	100%

TABLE 4: SHOWING THE MARITAL STATUS OF PARTICIPANTS

S/NO	EDUCATIONAL STATUS	NUMBER	PERCENTAGE
1	UNMARRIED	10	4.26%
2	MARRIED TO ONE WIFE	160	68.09%
3	MARRIED TO MORE THAN ONE WIFE	65	27.66%
	TOTAL	235	100%

TABLE 5: SHOWING PATTERN OF SEXUAL DYSFUNCTION

S/NO	SEXUAL DYSFUNCTION	NUMBER	PERCENTAGE
1	DIFFICULTY IN ERECTION	144	61.28%
2	DIFFICULTY IN SUSTAINING ERECTION	32	13.62%
3	QUICK EJACULATION	30	12.77%
4	LOW SEX DRIVE	26	11.06%
5	LOW DRIVE AND DIFFICULTY IN ERECTION AND NO ORGASM	2	85%
6	NO ORGASM	1	43%
	TOTAL	235	100%

Difficulty in erection was the most common pattern of erectile dysfunction.

FIGURE 1: BAR CHART SHOWING PATTERN OF SEXUAL DYSFUNCTION

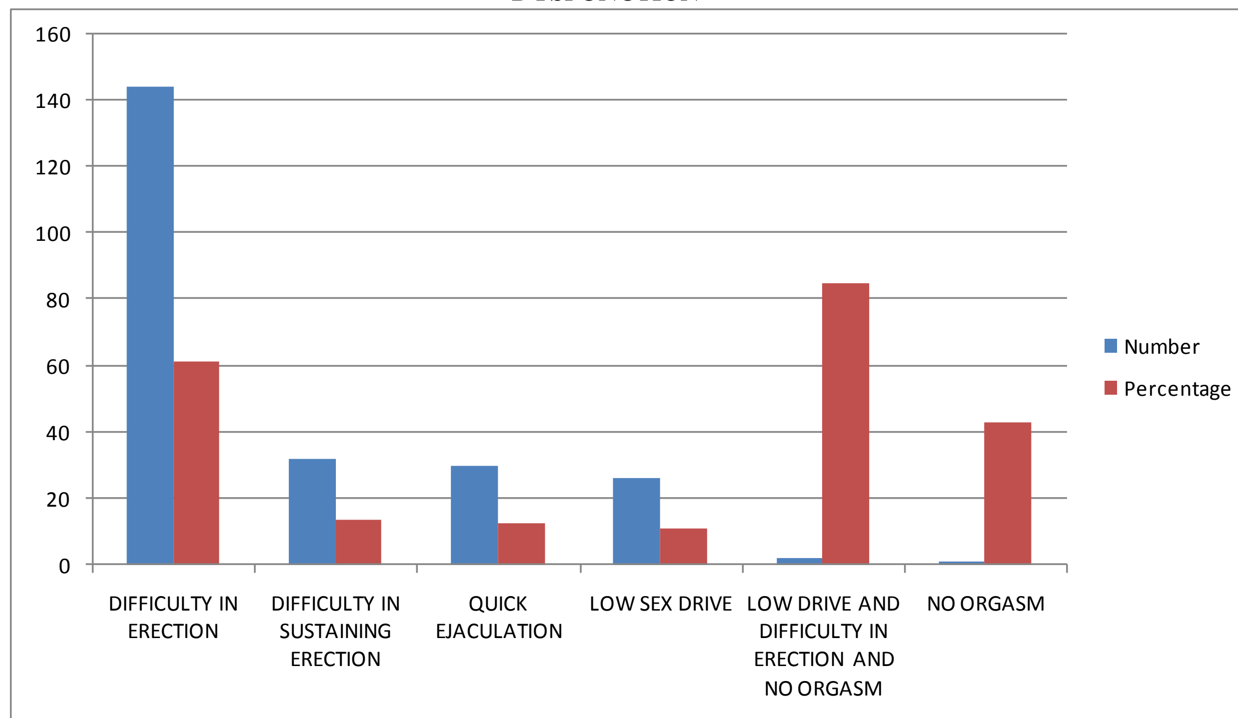

TABLE 6: SHOWING THE PATTERN OF ASSOCIATED COMORBIDITIES

S/NO	SEXUAL DYSFUNCTION	NUMBER	PERCENTAGE
1	HYPERTENSION AND ITS MEDICATIONS ALONE	70	29.78%
2	DIABETES MELLITUS ALONE	55	23.40%
3	PROSTATE DISEASES (CAD + BPH)	52	22.13%
4	BOTH HYPERTENSION AND DIABETES COMBINED	45	19.15%
5	PELVIC SURGERY	20	8.51%
6	NONE	15	6.38%
7	OTHER NON SPECIFIC CONDITION	10	4.26%
	TOTAL	235	100%

n = No. of participants was 235 but there was intersection. Some who had prostate diseases had hypertension and some diabetes mellitus. Also, some who had pelvic surgery also had hypertension or diabetes mellitus or prostate disease.

FIGURE 2: BAR CHART SHOWING THE PATTERN OF ASSOCIATED COMORBIDITIES

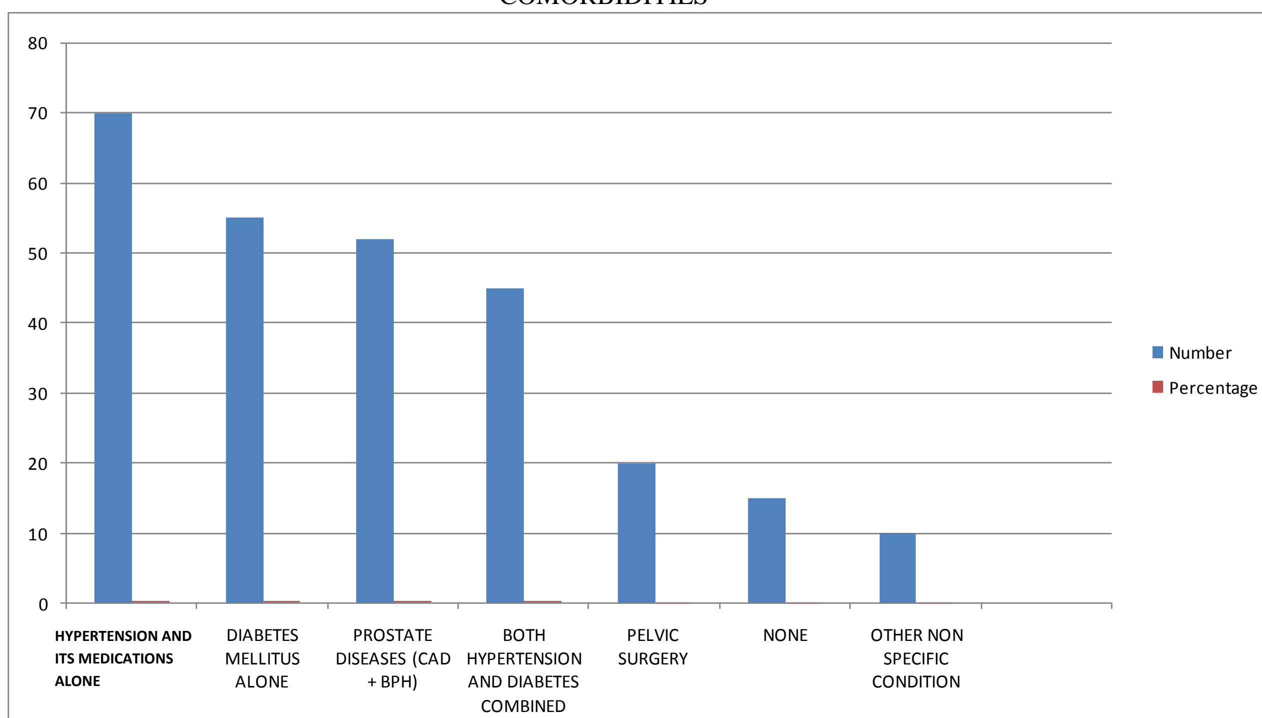

TABLE 7: SHOWING THE PATTERN OF SOCIAL HABITS AMONGST THE PARTICIPANTS

S/NO	SEXUAL DYSFUNCTION	NUMBER	PERCENTAGE
1	ALCOHOL USE ALONE	115	48.94%
2	ALCOHOL + CIGARETTE	70	29.79%
3	NONE	30	12.77%
4	ALCOHOL + CANNABIS	10	4.26%
5	CIGARETTE ALONE	10	4.26%
	TOTAL	235	100%

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TABLE 8: SHOWING TREATMENT CHOICES OF PARTICIPANTS

S/NO	SEXUAL DYSFUNCTION	NUMBER	PERCENTAGE
1	MEDICAL BY TRAINED MEDICAL PERSONNEL	115	48.94%
2	OTHER HEALTH PROFESSIONALS	40	17.02%
3	PATENT MEDICINE DEALERS	30	12.77%
4	TRADITIONAL / HERBAL PRACTITIONERS	30	12.77%
5	NO TREATMENT	20	8.51%
	TOTAL	235	100%

TABLE 9: SHOWING THE DEGREE OF BOTHER BY THE PARTICIPANTS

S/NO	DEGREE OF BOTHER	NUMBER	PERCENTAGE
1	MODERATE BOTHER	90	38.29%
2	SEVERE BOTHER	60	25.53%
3	MILD BOTHER	50	21.27%
4	NO BOTHER	35	14.89%
	TOTAL	235	100%

TABLE 10: SHOWING THE DEGREE OF BOTHER BY THE SPOUSES OF PARTICIPANTS

S/NO	DEGREE OF BOTHER	NUMBER	PERCENTAGE
1	SEVERE / TERRIBLE	135	45%
2	MODERATE / BAD	90	30%
3	MILD BOTHER	50	16.6%
4	NO BOTHER	25	8.33%
	DUE TO POLYGAMY n = 300	300	100%

A high number of spouses are feeling terrible due to their husbands' erectile dysfunction.

TABLE 11: SHOWING THE DEGREE OF ERECTILE DYSFUNCTION USING THE IIEF - 5

S/NO	DEGREE OF ERECTILE DYSFUNCTION	NUMBER	PERCENTAGE
1	MILD ED	95	40.43%
2	MILD TO MODERATE ED	68	28.93%
3	MODERATE ED	45	19.18%
4	SEVERE ED	27	11.50%
	TOTAL	235	100%

Out of the 235 participants, 10 (4.26%) were unmarried and 40 participants (17.02%) experienced ED with their wives but had some degree of improved performance extramaritally.

35 participants (14.89%) stuck to their wives despite their ED and had no extramarital experience because of their faith.

150 participants (63.83%) had ED both with wives and extramaritally.

30 participants (12.77%) admitted to having some degree of marital conflict with their spouses.

35 participants (14.89%) claimed they still experienced early morning arousal and erection.

Out of 52 participants who suffered from prostate challenge, 30 (57.69%) admitted to worse symptoms of ED after onset of their prostate problems.

III. DISCUSSION

In this work, we had prevalence rate of 52.2% of ED in Aba, South Eastern Nigeria.

Both the highly educated and the poorly educated had significant incidence of ED.

Difficulty in erection seen in 144 men (61.28%) was the most common pattern of affliction.

Hypertension and its medications (29.78%), diabetes mellitus (23.40%), prostate disease (22.13%) were common disease conditions associated with ED.

Alcohol use (48.94%) was the most common social habit seen among the participants. Treatment by trained medical personnel remained the most common source of treatment.

In a work by A.U. Idung et al, on the prevalence and risk factors of erectile dysfunction in the Niger Delta region of Nigeria, the prevalence rate was 41.5%. 16.5% had mild ED, 8% had mild to moderate ED, 6% had moderate ED, and 11.3% had severe ED. Hypertension and its medications were seen in 9.2% of patients, diabetes 7.2%, 12.2% from those with a combination of hypertension and diabetes mellitus. Previous surgery was 6% and undiagnosed medical conditions 6.8%. They found out that ED increased with age and was seen among married and educated men.

In another work by Nafiu Amidu et al on sexual dysfunction among Ghanaian men presenting with various medical conditions, they found the highest prevalence of sexual dysfunction among ulcer patients (100%), following by patients post surgery (75%), Diabetes mellitus (70%), hypertension (50%), sexually transmitted diseases (50%), and the least seen in migraine patients (41.7%).

In another work in South Africa by H. De Klerk et al on prevalence and characteristics of ED in black and mixed race primary care population of Cape Flats and Helderberg Basin area of Western Cape, South Africa, they found significantly associated diseases to be hypertension, diabetes mellitus, gastrointestinal and heart diseases, alcohol consumption in the younger population and smoking in the older population.

In a work by Kenan B. Nyalile et al in Tanzania, East Africa on the prevalence and factors associated with erectile dysfunction among adult men in Moshi Municipal, Tanzania: a community based study, they had a prevalence rate of 29.78% of the 115 men with ED.

51 (45.3%) had mild ED, 37 (32.7%) had mild to moderate ED, 14 (12.3%) had moderate ED while 11 (9.7%) had severe ED.

Alcohol use, overweight and obesity, high blood pressure and Diabetes mellitus were associated with ED.

From these works, it can be seen that hypertension and its medications, and diabetes mellitus were persistently being associated with erectile dysfunction.

IV. CONCLUSION

The incidence of erectile dysfunction is high in Aba. Co-morbidities, especially hypertension, diabetes mellitus, and prostate diseases have significant association with ED.

Both the poorly and the highly educated are significantly affected by it. Social habits of alcoholism and smoking are significantly associated with ED.

V. RECOMMENDATIONS

(1) Health workers need to counsel patients against excessive indulgence in alcoholism and smoking.
(2) Health workers also need to counsel and enlighten patients to reduce the stigma associated with ED.
(3) Medical personnel should pay good attention to the associated co-morbidities in order to reduce significantly the associated incidence of ED.
(4) Presently, it has been known that ED is a forerunner of cardiovascular diseases and therefore, ED patients need comprehensive cardiovascular and urologic evaluations.

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