

Original Research Article

Influence of Psycho-Demographic Factors on Sexual Dysfunction among People Living with Disabilities

Abstract

Background: Nigeria has roughly 12 million citizens living with disabilities. Prevalent social stigmas often discriminate against their social, physical and psychological well-being which directly or indirectly affects their sexual life. This study aimed to assess the influence of psycho-demographic factors on the sexual life of people living with disabilities.

Methods: The study was carried out among 79 participants, 18 years old and above at the Rehabilitation Centre Moniya. The study was ex post facto research study. Purposive and snowball sampling techniques were used for the study. Data were analyzed using SPSS version 21.

Results: Young subjects and male participants had higher meanscores ($x=21.94$) on the sexual dysfunction scale than female participants. Participants living with physical disability had higher means ($x=22.21$) on the sexual dysfunction scale than participants with hearing impairment. Age, gender, type of disability and religion statistically predicted sexual dysfunction among participants. Also, self-esteem and self-efficacy influence sexual dysfunction among participants living with physical disability and participants living with hearing impairment.

Conclusion: Age, gender and nature of disability influence the sexual life of people living with disabilities. Moreover, sexual dysfunction reduces with an increase in self-esteem and self-efficacy. It is therefore recommended that attention is paid to individuals living with disabilities in order to improve the quality of the sexual aspect of their lives and their psychological wellbeing.

Keywords: Disabilities, psycho-demography, sexual dysfunction

Introduction

In some developing countries, some people living with disability, depending on the severity, are commonly viewed in terms of charity and welfare. This viewpoint is a significant, entrenched factor that seriously militates against their social inclusion within the country. People with physical disabilities in Nigeria have a heavy psychological burden due to social deprivations coupled with their struggle for economic survival.¹

Prevalent social stigmas often discriminate against the population with disability, some local ancient mythology has it that this set of people are social outcasts serving retribution for offenses of their forefathers, including the commonly held erroneous perception that they are asexual creatures and that sexual behavior is inappropriate for them to engage in.^{2,3}

People who have physical impairments may find themselves rejected by other members of society because of their atypical bodies or facial features despite the fact that they have the same body composition as non-disabled individuals, the lack of research and literature devoted to sexual health and reproductive needs of individuals living with disability reinforces social perceptions that persons in the disabled community do not have sexual activity or sexual health needs. Shakespeare,⁴ notes that people living with disability in general, are often discouraged from an early age from discussing matters of a sexual nature, with the misplaced assumption that they are asexual. They conclude that individuals with disabilities are often denied sexual relationships not because of biology, but social, political and economic barriers.

Also, individuals with a disability are more likely to perceive themselves as sexually unattractive and sexually inadequate which tends to lead to low levels of sexual confidence.^{5,6} Other factors that can influence sexual dysfunction include gender, type of disability and age. One of the predominant variables in determining sexual dysfunction in the intimate relationships of disabled adults is the type of disability.⁷ Another study observed that people with disabilities reported lower self-esteem and higher levels of sexual depression compared to non-disabled persons.⁸

People with more severe physical impairments experienced significantly lower levels of sexual esteem and sexual satisfaction.⁸ Another study found that individuals with severe disabled persons reported less satisfaction with their bodies and were found to have lower levels of body esteem.⁹

Therefore, this study aimed to assess the influence of psycho-demographic factors and sexual dysfunction in people living with disabilities.

Methodology

Study Design

The first part of this study was an ex post facto research study because the events that was observed which is the influence of psycho-demographic factors, had already taken place. The independent variables in this part of the study were psycho-demographic factors. The dependent variable is sexual dysfunction.

Study population

The study was carried out among 79 subjects 18 years and above at the Rehabilitation Centre Moniyaa among those who have either physical disability or hearing impairment.

Instruments

Psychometric properties of the research instrument

The research tool for data collection was a structured questionnaire in 5 sections.

Section A: This section of the questionnaire contains items measuring the demographic variables of the participants.

Section B: A 20-item scale that measures a participant's self-esteem at a given point in time. The 20 items are subdivided into 3 components of self-esteem: (1) performance self-esteem, social self-esteem, and appearance self-esteem. It is a standardized scale which was developed and validated by Heatherton, T. F. and Polivy, J in 1991.¹⁰ All items are answered using a 5-point scale (1= not at all, 2= a little bit, 3= somewhat, 4= very much, 5= extremely).

Section C: This section consists of items measuring self-efficacy. The General Self-Efficacy Scale is a 10-item psychometric scale that is designed to assess optimistic self-beliefs to cope with a variety of difficult demands in life. The scale is also a standardized instrument which was originally developed in German by Jerusalem and Schwarzer and has been used in many studies.¹¹ The scale can be used on both adolescents and adults.

Rating Scale: 1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true.

Section D: The Female Sexual Function Index which is a multidimensional self-report instrument for the assessment of female sexual function (Rosen, Brown, Heiman, et al., 2000) and the international Index of Erectile Function (Rosen et al., 1997) were used.^{12,13} This section of the questionnaire consists of items measuring various aspects of sexual dysfunction.

Section E: This section consists of 25 items measuring sexual satisfaction (Corcoran, K. & Fischer, J., 2000).¹⁴

Procedure

Purposive and snowball sampling techniques were used for the study. Informed consent was sought from the participant. Self-administered questionnaires were distributed following a proper explanation of the study objective. Utmost confidentiality was ensured.

Data Analysis

After all the data collected at the fieldwork were collated, they were coded and analysis was done using Statistical Package for the Social Science (SPSS) version 21. The statistical methods that were used in this analysis were means, standard deviation, percentages, t-test for independent groups, analysis of variance (ANOVA), multiple classification analysis (MCA) and multiple regression. All the analyses were done at 0.05 level of significance.

UNDER PEER REVIEW

Results

After the collation of data, they were coded and sent for computer analysis. The computer software programme of Statistical Package for the social sciences (SPSS) was used for the analysis. Analysis of co-variance, means, standard deviation, percentages, Analysis of variance and t-test were also computed. All the analyses were done at 0.05 level of significance.

Participants

Table I reveals that young participants had higher means 21.72 ($x=21.72$) on the sexual dysfunction scale. Also, male participants had higher means 21.94 ($x=21.94$) on the sexual dysfunction scale than female participants whose mean score on the sexual function scale was 21.49 ($X = 21.49$).

It was also observed that participants with physical disability had higher means 22.21 ($x=22.21$) on the sexual dysfunction scale than participants with hearing impairment whose mean score on the sexual function scale was 21.17 ($X = 21.17$).

Table I: Participants Demographic Characteristics

Variables	N	%	Mean (X)	SD
Age group				
Young	47	59.5	21.72	5.14
Mature	32	40.5	21.59	5.38
Total	79	100%	21.67	5.20
Gender				
Male	32	40.5	21.94	4.78
Female	47	59.5	21.49	5.52
Total	79	100%	21.67	5.20
Type of disability				
Physical disability	38	48.1	22.21	6.23
Hearing impairment	41	51.9	21.17	4.05
Total	79	100%	21.67	5.20

Table II shows that young male participants who are living with physically disability were identified to have higher sexual dysfunction with a mean score of 24.75 ($X = 24.75$) on the sexual dysfunction scale than young male participants living with hearing impairment whose mean score on sexual dysfunction scale was 21.00 ($X = 21.00$). Also, young female participants with hearing impairment were identified to have high sexual dysfunction with a mean score of 22.00 ($X = 22.00$) on the sexual dysfunction scale than young female participants who are living with physical disability whose mean score on sexual dysfunction scale was 19.83 ($X = 19.83$).

It could also be observed that mature male participants living with hearing impairment were identified to have high sexual dysfunction with a mean score of 21.50 ($X = 21.50$) on the sexual dysfunction scale than mature male participants who are living with physical disability whose mean score on sexual dysfunction scale was 20.67 ($X = 20.67$).

Table II: Sexual dysfunction and type of disability in relation to age and gender

Age group	Gender	Type of disability	Interaction	X	SD	N	Ranking
Young	Male	Physical disability	YMP	24.75	2.31	8	1 st
		Hearing impairment	YMD	21.00	6.04	8	5 th
Old	Female	Physical disability	YFP	19.83	7.20	12	7 th
		Hearing impairment	YFD	22.00	3.36	18	3 rd
	Male	Physical disability	OMP	20.67	5.22	9	6 th
		Hearing impairment	OMD	21.50	3.83	6	4 th
Female	Physical disability	OFP	24.67	7.19	9	2 nd	
	Hearing impairment	OFD	19.25	2.82	8	8 th	

N=79

Table III shows that age, gender, type of disability and religion statistically predicted sexual dysfunction among the surveyed subjects. The value of R square (R²) indicated this. The R² indicates the amount of contribution of the demographic variables to the prediction of the dependent variables. Thus, age is responsible for 13% of the variation in sexual dysfunction among the participants in the survey study, while gender accounted for 17%, and type of disability is responsible for 36%. Religion did not yield any significant contribution to the predictability of sexual dysfunction.

Table III: Sexual dysfunction as predicted by age, gender, types of disability, and religion

Predictors variables	B	SE	B	T	Sig	R	R ²	P
Age	-.10	.08	-.10	1.21	.002	.36	.13	<.01
Gender	-.59	1.25	-.59	.47	.046	.41	.17	<.05
Type of disability	-	1.31	-.15	1.22	.000	.59	.36	<.001
Religion	-	1.80	-.09	.74	.461	.18	.03	N.S

Table IV reveals that psychological factors did not have a significant interaction effect as obtained in the study, but instead, a significant main effect.

Table IV: Interaction effect of self-esteem and self-efficacy on Sexual Dysfunction

Source	SS	DF	MS	F	P
Self Esteem	298.591	1	298.591	18.217	<.01
Self-Efficacy	241.961	1	241.961	14.762	<.01
Self-esteem * Self efficacy	11.004	1	11.004	.671	>.05
Error	1229.334	75	16.391		
Total	39212.000	79			

Discussion

This study investigated the influence of psycho-demographic factors and the efficacy of psycho-behavioral techniques on sexual dysfunction among individuals living with disabilities. The first part of the study examined the influence of psycho-demographic factors, which was a survey study. The second part was a quasi-experimental study that measured the efficacy of psycho-behavioral techniques on sexual dysfunction of individuals living with disabilities.

This study observed that the age of an individual with a disability could significantly influence sexual dysfunction. It was discovered that young people suffer more sexual dysfunction compared to mature participants, this can be due to the fact that young people living with disability are not properly equipped to cope with their various forms of disability in various aspects especially when it comes to their sexuality.

Many young people with disabilities have no experience of an independent social life and few opportunities to make friends: they spend most of their time with family or paid carers and have no independent access to so many things over which they have choice and control. Many young people who have significant communication impairments reach adulthood without proper assessment of their communication needs or concerted action to meet these needs. Young people with high levels of support needs, often move into residential or nursing care or rehabilitation home as they reach adulthood, and sometimes have little or no contact with young people their own age in order to express their fears and concern, especially in the area of sex. All these factors are likely reasons why young people suffer a higher level of sexual dysfunction as compared to the mature ones who have learned to manage their sexuality over time.

There was a significant influence of gender on sexual dysfunction. This is in agreement with Taleporos and McCabe.⁸ This is also in line with Umannah et al who found high sexual dysfunction among people living with disabilities.¹⁵ Predictors of sexual satisfaction among

adults living with disabilities varied by gender. Among the male participants with disabilities, it was discovered that they reported lower levels of both sexual activity and sexual satisfaction in comparison to females. As observed in this study where male participants scored higher on sexual dysfunction. In other words, male participants living with disabilities experience more sexual dysfunction compared to female participants. This can be because a man's ability to perform when it comes to sex is affected by a number of physical, psychological and social situations.

It was discovered that participants with physical disability had a high level of sexual dysfunction compared to participants living with hearing impairment. Another study found that women and men living with physical disabilities had greater sexual needs (such as needing assistance in maneuvering during sex) and fewer incidences of sexual experiences.¹⁰ The reason individuals with physical disabilities were discovered to have scored higher on the sexual dysfunction scale as compared to individuals with hearing impairment may be due to the numerous problems faced by individuals with physical impairments some of which includes poor muscle control, weakness and fatigue, difficulty talking, seeing, sensing or grasping (due to pain or weakness), difficulty reaching things, and difficulty doing complex or compound manipulations.

There was a significant interaction effect of demographic variables on sexual dysfunction among survey subjects. This means that age, gender, and type of disability jointly influence sexual dysfunction.

Moreso, self-esteem and self-efficacy does not jointly influence sexual dysfunction among the survey participants, but each of the psychological factors independently produces an influence on sexual dysfunction. This is in line with the finding of Owiredu et al. who affirmed that sexual dysfunction could have a significant impact on self-esteem through avoidance of sexual act, vaginismus and impotence which consequently leads to emotional discomfort and interpersonal relationship.¹⁶ It is possible for an individual living with a disability to have high self-esteem but low self-efficacy, in other words, they are two different concepts which do not jointly predict the level of sexual dysfunction but independently have various influences on the level of sexual dysfunction.

Some research has shown the correlations between sexual wellness (which includes sexual esteem and sexual satisfaction) and general self-esteem. A study observed that people with disabilities reported lower self-esteem and higher levels of sexual depression compared to persons who are not living with disabilities.¹⁷ Salehi et al found no significant difference in the level of self-esteem of individuals living with varying forms of disability in both men and women.¹⁸ Self-esteem in terms of sexuality determines how an individual interacts with the opposite sex, who an individual feels attracted to, the things an individual tries and what is been avoided.

When an individual has high self-esteem as a sexual man or sexual woman, the opposite sex is often attracted. When an individual has high sexual self-confidence as a sexual individual, he/she becomes self-assured, very relaxed, sensuous and better able to use the body as an intelligent channel for ideas, emotions, sexual interest and sexual desire. The individual can

figure out how to get what is wanted out of life. When an individual has a strong self-efficacy, love lovemaking and sex is more enjoyable; the individual begins to enjoy making love for a much greater time because the innate sense of your sexual value is appreciated. Erotic yearnings, sexual feelings, libidinous desires, and sexual impulses connect an individual strongly with his or her sexual partner.

It was observed from this study that the theoretical models underlying sexual dysfunction including theories underlying the independent variables as discussed earlier could have an influence on the extent to which an individual with a disability can experience sexual dysfunction.

Conclusion

In conclusion, age and gender have an influence on sexual dysfunction, as young participants had a high level of sexual dysfunction compared to **mature** participants and male participants have a high level of sexual dysfunction as compared to females. Also, self-esteem and self-efficacy influence sexual dysfunction **among individuals with physical disability and hearing impairment**. As self-esteem and self-efficacy increases so also sexual dysfunction reduces.

Recommendations

As a result of the findings in this study, there is a need for action on the part of the society, the governmental agencies, the non-governmental organisations, medical practitioners and also the people living with disabilities themselves.

Recommendations that are made by the researchers are as follows;

1. Governmental agencies, non-governmental organization, professional associations and vocational rehabilitation counselors should design sensitization programs quarterly for the society, in order to improve the rate at which people living with disabilities are accepted in the society.
2. Secondly, based on the findings of this study, nongovernmental organizations in public health and mental health professionals should organize programs quarterly to help these set of people 'people living with disabilities' so as to be able to see themselves beyond their disabilities and also issues concerning their sexual life should also be discussed. In addition, the government should enact policies to guide this set of people especially the female because it was also observed that some of them were been abused sexually and a good number of them found it difficult to resist as a result of these disabilities.
3. Thirdly, educators, healthcare professionals, services providers, advocates, and government leaders should develop a coordinated national disability policy that is driven and consistent with the United Nations' Resolution regarding the rights of people with disabilities, and the result of the research work can be used to draw the attention of clinical psychology departments especially in Nigeria to the sexual problems among individuals living with disabilities, by showing a need for a special intervention centre for sexual problems specifically for this set of people. The intervention centre should be multi-disciplinary so as to be able to assess both psychological and organic aspects of the problem, and the intervention centre should be equipped to provide both psychological and physical interventions/treatments. The intervention centre should comprise of units such as urology

unit to assess the organic and psychogenic causes of sexual dysfunction, also family planning unit need to offer psychosexual counselling services and other relevant units. There should also be help-line services which can render confidential services to timid people or those who are afraid of being stigmatized, by their attendance of a sexual dysfunction intervention centre.

Ethical Approval

Ethical approval was obtained from the Department of Psychology, University of Ibadan ethical board.

UNDER PEER REVIEW

References

1. Gordon, P. A., Tschopp, M. K., & Feldman, D. (2004). Addressing issues of sexuality with adolescents with disabilities. *Child and Adolescent, 21*(5), 513-527.
2. Wazakili, M., Mpofo, R., & Devlieger, P. (2006). Experiences and perceptions of sexuality and HIV/AIDS among young people with physical disabilities in a South African township: A case study. *Sexuality and Disability, 24*, 77-85.
3. Wolfe, P. (1997). The influence of personal values on issues of sexuality and disability. *Sexuality and Disability, 15*(2), 69-90.
4. Di Guilio, G. (2003). Sexuality and people living with physical or developmental disabilities: A review of key issues. *The Canadian Journal of Human Sexuality, 12*(1), 53-68.
5. Basson, R. (2001). Human sex-response cycle. *Journal of Sex and Marital Therapy, 27*, 33-43.
6. Taleporos, G., & McCabe, M. (2005). The relationship between the severity and duration of physical disability and body esteem. *Psychology and Health, 20*(5), 637-650.
7. Lease, S., Cohen, J., & Dahlbeck, D. (2007). Body and sexual esteem as mediators of the physical disability-interpersonal competencies relation. *Rehabilitation Psychology, 52*(4), 399-408.
8. McCabe, M. P., & Taleporos, G. (2003). Sexual esteem, sexual satisfaction, and sexual behavior among people with physical disability. *Archives of Sexual Behavior, 32*(4), 359-369.
9. Hassouneh-Phillips, D., & McNeff, E. (2005). "I thought I was less worthy:" Low sexual and body esteem and increased vulnerability to intimate partner abuse in women with physical disabilities. *Sexuality & Disability, 23*(4), 227-240.
10. Heatherton, T. F. & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology, 60*, 895-910.
11. Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.). *Self-efficacy: Thought control of action* (pp.195-213). Washington, D.C, USA: Hemisphere.
12. Rosen R, Brown C, Heiman J, et al. (2000) The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *J Sex Marital Ther ;26:191-208.*
13. Rosen RC, Riley A, Wagner G, Osterloh IH, Kirkpatrick J, Mishra A. (1997) The international index of erectile function (IIEF): a multidimensional scale for assessment of erectile dysfunction. *Urology. Jun;49(6):822-30. doi: 10.1016/s0090-4295(97)00238-0. PMID: 9187685.*
14. Corcoran K, Fischer J (2000). *Measures for Clinical Practice: A Sourcebook*. New York, NY: The Free Press.
15. Umunnah, J.O., Onyema, A.O., Uchenwoke, C.I. et al. (2021) Sexual Dysfunction and Self-Esteem in People with Mobility-Related Disability Within Select Nigerian Communities. *Sex Disabil 39*, 659–669. <https://doi.org/10.1007/s11195-021-09711-1>
16. Owiredu WK, Owusu AO, Amidu N, Quaye L, Gyasi-Sarpong CK, Dapare PP, Alidu H. (2015) Sexual dysfunction and sexual quality of life among the physically challenged in

the Kumasi metropolis, Ghana. *Health Qual Life Outcomes*. Jan 22;13:3. doi: 10.1186/s12955-015-0206-8. PMID: 25608611; PMCID: PMC4311510.

17. Taleporos, G., & McCabe, M. (2001). Physical disability and sexual esteem. *Sexuality and Disability*, 19(2), 131-148.
18. Salehi M, Kharaz Tavakol H, Shabani M, Ziaei T. (2015). The relationship between self-esteem and sexual self-concept in people with physical-motor disabilities. *Iran Red Crescent Med J*. Jan 17;17(1):e25359. doi: 10.5812/ircmj.25359. PMID: 25763279; PMCID: PMC4341498.

UNDER PEER REVIEW