

Recognising Female Sexual Dysfunction as an Essential Aspect of Effective Diabetes Care

Sex is an important part of all adult relationships

Exploring sexuality and sexual wellbeing with women is part of the holistic nature of care

Female Sexual Dysfunction has become more recognised as an aspect of living with diabetes

Diabetes is one of the most common long term diseases in nearly all countries

Female Sexual Dysfunction is generally a self-reported condition, thereby continues to be unrecognised

Sexual difficulties in females appear currently more readily recognised in society

Anne Phillips Senior Lecturer in Diabetes Care, University of York, UK

Webpage: www.york.ac.uk/healthsciences/our-staff/anne-phillips

Stephen Phillips Senior Lecturer in Nursing, University of Huddersfield, UK

Webpage: www.hud.ac.uk/ourstaff/profile/index.php?staffuid=shumsp

Recognising Female Sexual Dysfunction as an Essential Aspect of Effective Diabetes Care

D diabetes is one of the most common long term diseases in nearly all countries and is increasing to epidemic proportions; the International Diabetes Federation (IDF, 2015) reported a world prevalence of 387 million people diagnosed and living with diabetes which is 8.3% of the world population. Also predicted is 46.3% of the world population being undiagnosed currently.



A higher prevalence of Female sexual dysfunction (FSD) has been associated with diabetes (*Maiorino et al, 2014*).

The historical paucity of research into FSD, as compared to male, is only becoming addressed more frequently in more recent years. A key reason being related to an emphasis on traditional research approaches regarding recognition of male sexual dysfunction linking to reproduction purposes whereas female sexual functioning not having this requirement (*Maiorion et al, 2014*).

In males, orgasms are under 'strong selective pressure' as orgasms are coupled with ejaculation thus contributing to reproductive success (*Wallen & Lloyd, 2010*).

By contrast, female orgasms in intercourse are under little selective pressure as they do not constitute a reproductive necessity.

Normal sexual function in females occurs by an interaction between emotional and physical wellbeing, this complex interaction maybe modified by disease, anatomic, physiological and/or emotional causes (*Vaccaro et al, 2014*).



Female sexuality has begun to be considered as an important aspect of women's health with the World Health Organisation (*WHO, 2014*) declaring this as a basic human right.



Exploring sexuality and sexual wellbeing with women is part of the holistic nature of care and therefore the complexities of sexual identity and sexual dysfunction relating to living with diabetes need recognition within practice (*Phillips & Khan, 2010*).

The main findings from evaluating international research evidence highlights the unique role practitioners have with women with diabetes and how to facilitate partnership working.

- Nurses have the most frequent contact with people living with diabetes in any healthcare system.
- Nurses' knowledge about sexuality in relation to diabetes should improve patient education & recognition. Nurses can signal undiagnosed or increased risk of FSD to enable treatment so care can be optimised accordingly (*Sivrikaya et al, 2014*).

Hyperglycaemia is the main determinant of preventable vascular and neuropathic complications of diabetes and control of risk factors in a person centred partnership is the focus of effective diabetes care (*Phillips, 2012*).

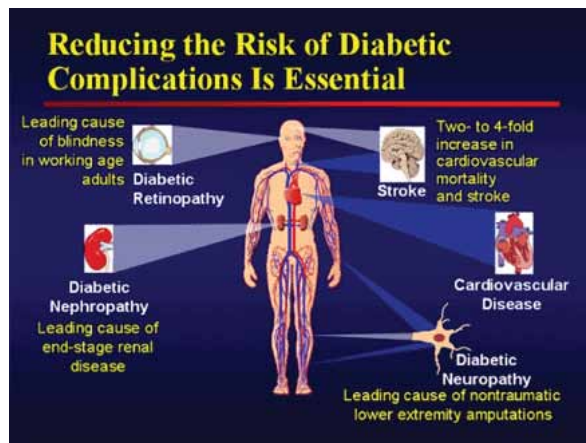
- FSD is associated with both type 1 insulin dependent diabetes (*Enzlin et al, 2009*) and type 2 diabetes (*Giugliano et al, 2010*).
- Obesity and being overweight are associated (independently of age) with FSD (*Costa and Brody, 2014*).

Prolonged hyperglycaemia reduces the hydration of the vaginal mucus membranes, producing reduced lubrication & females experiencing dyspareunia (*Ismail et al, 2014, Erten et al, 2013*).

Hyperglycaemia increases the risk and incidence of genitourinary and fungal infections which can cause vaginal discomfort and dyspareunia (*Phillips, 2012*).

Vascular and neuropathic complications of diabetes can cause decreased nerve stimulation and blood flow, which inhibits sexual response to stimuli, thereby impairs reaction of the vaginal tissue to reduced nerve stimulation (Maiorino et al, 2014).

Atherosclerotic damage and diabetes-induced endothelial dysfunction interferes with clitoral engorgement and vaginal lubrication leading to decreased arousal and dyspareunia during intercourse. Additionally the presence of neuropathy can further participate by altering the normal transduction of sexual stimuli and triggered sexual response (Duby et al, 2004).



Vafaeimanesh et al, (2014) in their descriptive analytical study recognised a strong association of women experiencing FSD with psychological health issues such as anxiety, depression, low self-esteem, body image perception disorders, sexual performance anxiety, fear of rejection, past traumatic sexual experience and history of abuse (Bancroft et al, 2003, Cyranowski et al, 2004).

What practitioners need to ask?

Sexual health is very personal and women can feel embarrassed when asked about it. They might feel it more appropriate to see a female practitioner and they may or may not want to have their partner with them. Practitioners



need to demonstrate cultural and / or religious sensitivities when discussing sexual health and wellbeing.

Conclusion

Practitioners have a unique relationship with women with diabetes receiving care. Through acknowledging and recognising the increased risk of FSD and through effective consultation through partnership working in a person centred way this can be recognised and approached with sensitivity to help women who may feel embarrassed to broach this subject with practitioners believing it is their fault due to their diabetes. Reassuring consultation skills and having awareness of the evidence can enable effective consultations and treatment escalation as required to help women with their sexual health and sexuality.

References

- Bancroft J et al (2005) Distress about sex: a national survey of women in heterosexual relationships, *Arch Sex Behav*, 32, 193-208.
- Costa R & Brody S (2014) Orgasm & women's waist circumference, *European Journal of Obstetrics & Gynaecology & Reproductive Biology*, 182, 118-122.
- Cyranowski J et al (2004) Lifetime depression history & sexual function on women in midlife, *Arch Sex Behav*, 33, 539-48.
- Duby J et al (2004) Diabetic neuropathy: an intensive review, *Am J Health Syst Pharm*, 61, 2, 160-173.
- Enzlin P et al (2009) DCCT/EDIC Research Group. Sexual dysfunction in women with type 1 diabetes: long-term findings from the DCCT/EDIC study cohort, *Diabetes Care*, 32, 5, 780-886.
- Erten Z et al (2013) Sexual lives of women with diabetes mellitus (type 2) & impact of culture on solution for problems related to sexual life, *Journal of Clinical Nursing*, 23, 995-1004, DOI: 10.1111/jocn.12273.
- Giugliano F et al (2010) Determinants of erectile dysfunction in type 2 diabetes, *Int J Impot Res*, 22, 3, 204-209.
- International Diabetes Federation (2015) Diabetes Facts & Figures, <http://www.idf.org/worlddiabetesday/toolkit/gp/facts-figures> (accessed 010215).
- Ismail A et al (2014) Factor analysis study on sexual responses in women with type 2 diabetes mellitus, *Comprehensive Psychiatry*, 55, S34-S37.
- Maiorino M et al (2014) Diabetes & sexual dysfunction: current perspectives, *Diabetes, Metabolic Syndrome & Obesity: Targets & Therapy*, 7, 95-105.
- Phillips A & Khan K (2010) Assessment & support of women with sexual dysfunction, *Practice Nursing*, 21, 9, 474-477.
- Phillips A Ed (2012) Principles of Diabetes: evidence based management for health care professionals, Quay Books: UK.
- Phillips A & Phillips S (2015) Recognising Female Sexual Dysfunction as an Essential Aspect of Effective Diabetes Care, *Applied Nursing Research*, DOI: 10.1016/j.apnur.2015.04.007
- Sivrikaya S et al (2014) Sexual dysfunction & depression in Turkish women with Type 2 Diabetes, *Sex Dis*, 32, 3-13, DOI 10.1007/s11195-013-9337-1
- Vaccaro C et al (2014) Female sexual function & the clitoral complex using pelvic MRI assessment, *Eur J Obstet Reprod Biol*, 180, 180-5.
- Vafaeimanesh J et al (2014) Evaluation of sexual dysfunction in women with type 2 diabetes, *Indian Journal of Endocrinology & Metabolism*, 18, 175-9.
- Wallen K & Lloyd E (2011) Female sexual dysfunction: Genital anatomy & orgasm in intercourse, *Hormones & Behaviour*, 59, 780-792.
- World Health Organisation (2014) Sexual Health, <http://www.who.int/reproductivehealth/icpd/en/> (accessed 010215)

Investigative guide to help asking women about sexual dysfunction in diabetes

Diabetes Specific Questions	Rationale
What medications are you currently taking?	To establish whether there are any possible iatrogenic-related influences that can be addressed.
Are you experiencing any stress or depressive symptoms?	To review if depression is present & to enable discussion if this is the case. Review of treatment if depression is already diagnosed.
Have you recently had a baby?	To find out whether the woman has experienced a difficult delivery or birth injuries, & whether she is getting enough sleep & has sufficient support to help her.
Do you feel tired all the time?	To establish whether this is due to hyper or hypoglycaemic unawareness, which can both cause fatigue. If the woman's sleep pattern is disturbed, she may be experiencing anxiety, stress or depression.
Do you experience vaginal dryness?	To find out whether this is related to diabetes control, neuropathy, medication, hormones or the menopause & whether the woman would like to have treatment for this.
Do you feel uncomfortable or experience pain during sex?	To explore whether this maybe causing sexual anxiety.
Do you experience recurrent infections, especially thrush or urine infections?	To investigate whether this is due to sub-optimal control of the woman's diabetes. Fungal infections are easily treatable & advice regarding blood glucose control can be given.
General Questions?	Rationale
Do you feel there is a problem with your relationship with your partner?	To explore whether the woman is experiencing marital tensions or guilt about relationships, each of which can inhibit sexual experience.
Do you feel embarrassed by having sex?	To discover whether or not a past negative experience or previous abuse may be influencing the present situation.
Do you feel you have a poor self-image?	To give the woman an opportunity to discuss any feelings of depression or low self-esteem, for example due to obesity, which can have a negative impact on sexual function.
Have you ever experienced sexual or physical abuse?	To discover whether the woman has a past negative experience (see above).
<i>Adapted from Phillips & Khan, 2010.</i>	

