Sexual Function and Dysfunction

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Sex is like a gas station, sometimes you get full service, sometimes you gotta ask for service and sometimes you have to be happy with self-service!
In the real world

- Sexual practices are changing!
- Sexual identities and behaviours change at different rates and are influenced by different social factors
- Changes between the sexes and age groups
Sexual practices are changing

- National survey of sexual attitudes and lifestyles (NATSAL)
  - N=15162 (6293 men and 8869 women)

<table>
<thead>
<tr>
<th>Sexual behaviour - women</th>
<th>1990</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of partners over lifetime</td>
<td>3.7</td>
<td>7.7</td>
</tr>
<tr>
<td>No of occasions of SA in past 4/52</td>
<td>6.1</td>
<td>4.8</td>
</tr>
<tr>
<td>Vaginal sex in past month</td>
<td>76.3%</td>
<td>69.6%</td>
</tr>
<tr>
<td>Given or received oral sex in past month</td>
<td>65.6%</td>
<td>75.1%</td>
</tr>
<tr>
<td>Anal sex in past year</td>
<td>6.5%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Sexual experience with same sex partner</td>
<td>3.7%</td>
<td>16%</td>
</tr>
<tr>
<td>Masturbated in past 4/52</td>
<td>n/a</td>
<td>32.9%</td>
</tr>
</tbody>
</table>
Sexual practices are changing

- Frequency of sexual intercourse (SI) according to age group

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>No of occasions of SI in past 4/52</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-24</td>
<td>5.8</td>
</tr>
<tr>
<td>25-34</td>
<td>4.9</td>
</tr>
<tr>
<td>35-44</td>
<td>4</td>
</tr>
<tr>
<td>45-54</td>
<td>3.5</td>
</tr>
<tr>
<td>55-64</td>
<td>2.5</td>
</tr>
<tr>
<td>65-74</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Mercer et al 2013
Sexuality

Picasso
A woman’s sexuality is concerned not only with her sexual activity but also with the perception of her own self image and the formation of relationships with others.

Wheeler et al, 1990
Sexual Function
Psychosexual Function

Models

• Classical four phase cycle of excitement, plateau, orgasm and resolution
  Masters & Johnson, 1970

• Others stress the role of desire leading to arousal, triggered by sexual stimulus and modified by situational variables
  Janssen et al, 2000

• Basson’s non-linear model of female sexual response integrates emotional intimacy, sexual stimuli, and relationship satisfaction
  Basson et al, 2001
Normal Female Sexual Function

Masters and Johnson sexual response curve

Pleasure

Time

AROUSAL

PLATEAU

ORGASM

RESOLUTION
Physiology of SF

- The two basic physiological reactions that occur during sexual response:
  - vasoconstriction of the genitals
  - increased neuromuscular tension throughout the body

Masters and Johnson 1966
Physiology of SF

Fig. 1. Physiological changes in the current model of the female sexual response cycle. BP = blood pressure; HR = heart rate; RR = respiratory rate.
Female Sexual Function

Desire may be early stage of arousal, triggered by sexual stimulus, modified by situational variables

Sexual desire

Sexual arousal

Emotional intimacy

Sexual stimuli

Emotional and physical satisfaction

Sexual response cycle
(Positive Reinforcement)

Janssen et al. 2000
Normal Female Sexual Function

Basson et al, 2001
Female sexual function

Scientists find key difference between male and female brains
Female Sexual Dysfunction (FSD)
Female Sexual Dysfunction

- WHO International Classifications of Diseases – 10 (ICD-10), FSD is:
  
  ‘the various ways in which an individual is unable to participate in a sexual relationship as she would wish’

(WHO 1992)
Female Sexual Dysfunction

• FSD definition changed in 2013 to:-

‘a group of disorders that are typically characterised by a clinically significant disturbance in a person’s ability to respond sexually or to experience sexual pleasure’

• Symptoms have to have been present for 6/12 and been experienced in 75-100% of sexual encounters

(APA 2013 p423)
Additional definition criteria

- ‘the sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and it is not attributable to the effects of a substance / medication or another medical condition’

(APA 2013 p424)
Psychosexual Problems

- Dyspareunia (genital pelvic pain)
- Vaginismus (penetration disorder)
- Lack of libido (female interest / desire disorder)
- Orgasmic dysfunction
Female Sexual Dysfunction

Desire may be early stage of arousal, triggered by sexual stimulus, modified by situational variables

Low libido: negative body image, embarrassment

Sexual response cycle (Positive Reinforcement)

Emotional and physical dissatisfaction

Dyspareunia, vaginitis, vaginismus

Sexual stimuli

Janssen et al 2000
Prevalence

- Rates of female sexual dysfunction (FSD) in clinical populations is between 40-50%

- Systematic review of prevalence of sexual impairment in women with UI ranged from 0.6%-64%
  - Shaw 2002

- True rate among population unknown
Female Sexual Dysfunction

- One third of women lack sexual interest and a quarter are anorgasmic
  
  Laumann et al, 1999

- Associated with personal distress: 12-25%
  
  Palacios et al, 2009

- High prevalence in women seeking routine gynaecological care
  
  Nusbaum et al, 2000
## SDF differences between the sexes!

<table>
<thead>
<tr>
<th>Type of dysfunction</th>
<th>Men (%)</th>
<th>Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of interest</td>
<td>25</td>
<td>55</td>
</tr>
<tr>
<td>Coming to orgasm to quickly</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Inability to come to orgasm</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Not finding sex pleasurable</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Pain during intercourse</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Worry over how body looks</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>Anxiety about performance</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Vaginal dryness</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>Trouble maintaining erection</td>
<td>10</td>
<td>-</td>
</tr>
</tbody>
</table>

Richters et al 2013
Aetiology
Aetiology

• **Hormonal**
  During pregnancy, following childbirth, during lactation
  
  FSD increases after the menopause due to vaginal atrophy and diminished lubrication causing dyspareunia

• **Psychological**
  Stress and interpersonal conflict

  Urinary incontinence is a common, embarrassing problem

  POP and UI associated with less frequent intercourse

Hilton et al, 1988
Aetiology

• Medical: Thyroid dysfunction
  Hypertension
  Diabetes mellitus
  Neurological disease
  Substance abuse
  Psychiatric disease

• Medication: SSRI, TCA
  Phenothiazines
  Oestrogen and progesterone
  COCP
Pregnancy and Childbirth
Pregnancy and the Pelvic Floor

Pregnancy
- Mechanical trauma from supporting weight of fetus for 40 wks
- Hormonal changes

Childbirth
- Nerve injury
- Pelvic floor injury during vaginal delivery
- Iatrogenic trauma (episiotomy)

Which is more important?
Elective Caesarean Sections

Keep That Pelvic Floor ‘Honeymoon Fresh’

• Increasing demand for maternal request LSCS
• Trend amongst higher social class: ‘Too posh to push’
• ‘Celebrity’ childbirth
• Timing of delivery
• Concerns regarding vaginal laxity and sexual function
• Anxiety regarding bladder and bowel symptoms
Postpartum Sexual Dysfunction
Postpartum Sexual Dysfunction

- Dyspareunia most common after operative vaginal delivery
- No difference between SVD with an intact perineum and C/S
- Women with an intact perineum or first-degree perineal tear 6 months postpartum were more likely to experience orgasm than those with deeper perineal tears

Buhling et al, 2006
Postpartum Sexual Dysfunction

- 796 women
- 89% resumed sex within 6 months
- 83% had problems with intercourse
- 64% still having problems at 6 months
- Not related to mode of delivery
- Only 15% reported their problems

Barrett et al 2000
Pelvic Organ Prolapse Grading Systems
# Prolapse related SD symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyspareunia</td>
<td>Complaint of persistent or recurrent pain or discomfort associated with attempted or complete vaginal penetration</td>
</tr>
<tr>
<td>Obstructed intercourse</td>
<td>Complaint that vaginal penetration is impeded. Possible causes include narrowing or a bulge</td>
</tr>
<tr>
<td>Vaginal laxity</td>
<td>Complaint of excessive vaginal looseness</td>
</tr>
<tr>
<td>Libido – loss or decrease</td>
<td>Complain of loss or decrease of sexual desire</td>
</tr>
</tbody>
</table>
Prolapse and Sexual Dysfunction

• Sexual complaints are significantly more common in women with pelvic floor disorders
  Handa et al, 2003

• One third of women with advanced prolapse consider that it affects their sexual relations
  Barber et al, 2002

• Increasing grade of prolapse predicts interference with sexual activity but not frequency of intercourse or sexual satisfaction
  Weber et al, 1995
Prolapse and Sexual Dysfunction

- Sexual function in those with prolapse and incontinence is adversely affected
  
  Pauls et al, 2006

- Prolapse is more likely than incontinence to result in sexual inactivity

- Overall sexual satisfaction is independent of diagnosis of or treatment of prolapse or incontinence

  Barber et al, 2002
Patient’s Perspective

- **PFD: Women’s sexual concerns unravelled**
  - 37 women undergoing surgery for POP or UI interviewed
  - 17% positive about their sex life
  - Women with POP had negative image of their vagina and worried about partners experience
  - Reduced genital sensation > decreased desire, arousal and difficulty reaching an orgasm
  - Those with UI embarrassed about incontinence and pad use and feared smelling of urine
  - Fear of incontinence > decreased desire, arousal and orgasm
  - Both affected motivation or willingness to engage in SA

Roos et al 2014
Urinary Incontinence
Sexual Function and Urinary Incontinence

- Sexual function affected by UI 26-43%
  Sutherst et al, 1980

- Sexual dysfunction greater in those with urodynamic stress incontinence (USI) and detrusor overactivity (DO) than continent controls
  Walters et al, 1990

- Sexual dysfunction worse in those with DO compared to USI
  Sutherst et al, 1980

- Urinary leakage with sexual intercourse more common in USI
  Barber et al, 2002
Impact on relationships
Patient’s Perspective

- Interviewed incontinent women (n=31) and asymptomatic controls (n=60)
  - Incontinent women were 4.7 times less satisfied with their sexual lives
  - Their partners had ejaculation without full erection 3.1 more times

<table>
<thead>
<tr>
<th>Ways of coping with problems</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinating prior to sexual intercourse</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>Keeping the partner unaware of the problem</td>
<td>16</td>
<td>50</td>
</tr>
<tr>
<td>Deferring intercourse</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>Partner suggests anal coitus</td>
<td>2</td>
<td>6.3</td>
</tr>
<tr>
<td>Ignoring the problem</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Interrupting intercourse prematurely</td>
<td>6</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Beji et al 2005
Partners Perspective

- Women attending urology OPD and partner completed GRISS (N=189 couples 43% reported UI)
  - Women with UI demonstrated lower overall sexual function, lower frequency of intercourse, are more likely to show avoidable behaviour and have more problems with communication
  - Men with partners with UI reported an overall diminished sexual function, lower frequency of intercourse, reduced satisfaction and were more likely to have erectile problems

Becker et al 2010
Why don’t HCP talk about sex?

- SR of qualitative research in UK over 10 yrs
- Common themes
  - ‘Open up a can of worm’s’
  - Lack of time
  - Lack of resources
  - Lack of training
  - Concern about knowledge and ability
  - Worry will cause offence
  - Personal discomfort
  - Lack of awareness about sexual issues
  - Opposite gender / race / age concerns

Dyer et al 2013
Why don’t patients talk about sex?

- Barriers identified
  - Practical barriers
  - Emotional avoidance
  - Shyness
  - Stigma
  - Normal with aging mentality
  - Partners
  - Religious / cultural beliefs
  - Subjective nature of issue
Are we asking the right questions?

- Study of American Obstetricians and Gynaecologists

<table>
<thead>
<tr>
<th>Question</th>
<th>% Routinely asking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing sexual activity</td>
<td>63</td>
</tr>
<tr>
<td>Sexual problems</td>
<td>40</td>
</tr>
<tr>
<td>Sexual satisfaction</td>
<td>28</td>
</tr>
<tr>
<td>Sexual orientation / identity</td>
<td>27</td>
</tr>
<tr>
<td>Pleasure from sexual activity</td>
<td>13.8</td>
</tr>
</tbody>
</table>

- 25% reported expressing disapproval over patients reported sexual practices

Sobekis et al 2012
Who should ask and how?

- Among older adults, men prefer to discuss SF with a physician and women prefer to discuss with a nurse
  - Farrell 2012

- Pts more likely to seek help if a Dr has asked them about SF during a routine visit in previous 3 yrs
  - Hinchliff & Gott 2013
Aims of Study

• To understand how clinicians question patients about SF in real life practice

• To understand the barriers that prevent or discourage this line of questioning

• To consider when patients may not be truthful with their responses and to which questions they are most likely to be dishonest
Methods

• Mixed methods questionnaire developed and piloted in single centre
• Distributed at ICI-RS 2015
• Descriptive statistics and grounded theory for analysis
• 35 responses from a variety of HCP's
Results

• 40% do not feel confident discussing SF with members of the LGBT community due to
  − personal discomfort
  − lack of knowledge of the sexual practices performed

• 63% feel that questions are better asked by someone of the same sex

• 50% had experienced patients refusing to answer questions relating to SF

• If NSA, only 37% probe further to understand why

• 69% feel that a standardised assessment tool which asked the relevant SF questions would be beneficial in their clinic
## Results

<table>
<thead>
<tr>
<th>Questions</th>
<th>What aspects of sexual activity are women most likely to be dishonest about?</th>
<th>What aspects of sexual activity are men most likely to be dishonest about?</th>
<th>What do you feel are the barriers to discussing sexual function with women?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themes identified (frequency of answer)</td>
<td>Frequency of orgasm (5) &lt;br&gt; No of partners (4) &lt;br&gt; Frequency of sex (4) &lt;br&gt; Anal sex (4) &lt;br&gt; Masturbation (4)</td>
<td>Erection quality (5) &lt;br&gt; Ability to maintain erection (5) &lt;br&gt; Frequency (4) &lt;br&gt; Partner aspects (2)</td>
<td>Social taboo / culture / beliefs (7) &lt;br&gt; Pt embarrassment (3) &lt;br&gt; HCP embarrassment (3) &lt;br&gt; Lack of treatment options (3)</td>
</tr>
</tbody>
</table>
Focus Group

Well I don’t want you to blame my behaviour for the problem - you need to find another cause!

I haven’t had sex for two years but when you are under pressure in a strange environment and other people are listening you don’t want to be judged so I just said yes last week when asked if I was sexually active!
Assessment

If you do not know how to ask the right question, you discover nothing.

(W. Edwards Deming)
Essential questions to include in a sexual assessment

• How does the patient describe the problem?
• How long has the problem been present for?
• Was the onset sudden or gradual?
• Is the problem specific to a situation / partner or is it generalised?
• Were there likely precipitating events (biological or situational)?
• Are there problems in the woman’s primary sexual relationship?
• Are these current life stressors that might be contributing to the sexual problems?
• Is there guilt, depression or anger that is not being directly acknowledged?
• Are there physical problems such as pain?
• Are there problems in desire, arousal or orgasm?
• Is there a history of physical, emotional or sexual abuse?
• Does the partner have any sexual problems?
Assessment

- Questionnaires
  - Privacy (intimate issues)
  - Easier for less experienced clinician
  - Reliable, validated
  - Research
Validated Questionnaires

5th ICI recommendation (Grade A)

• Golombok-Rust Inventory of Sexual Satisfaction (GRISS)
• Female Sexual Function Index (FSFI)
• Sexual Quality of life – Female (SQOL)
• Pelvic Organ Prolapse / Urinary Incontinence Sexual Questionnaire (PISQ- 12 + IR)
• ICIQ-Vaginal Symptoms
Conclusion

• Female sexual dysfunction is common in women of all ages
• Sexual dysfunction is more common in women than men
• Detrimental effect on quality of life
• Pregnancy, childbirth, prolapse, incontinence and atrophy have major impact
• Communication is Key
• Multidisciplinary approach to management