

Global Prevalence of Sexual Dysfunctions, Prevalence of Sexual Dysfunctions in Kenya and in the US

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Definition of Sexual Health

(World Health Organization, 2002)

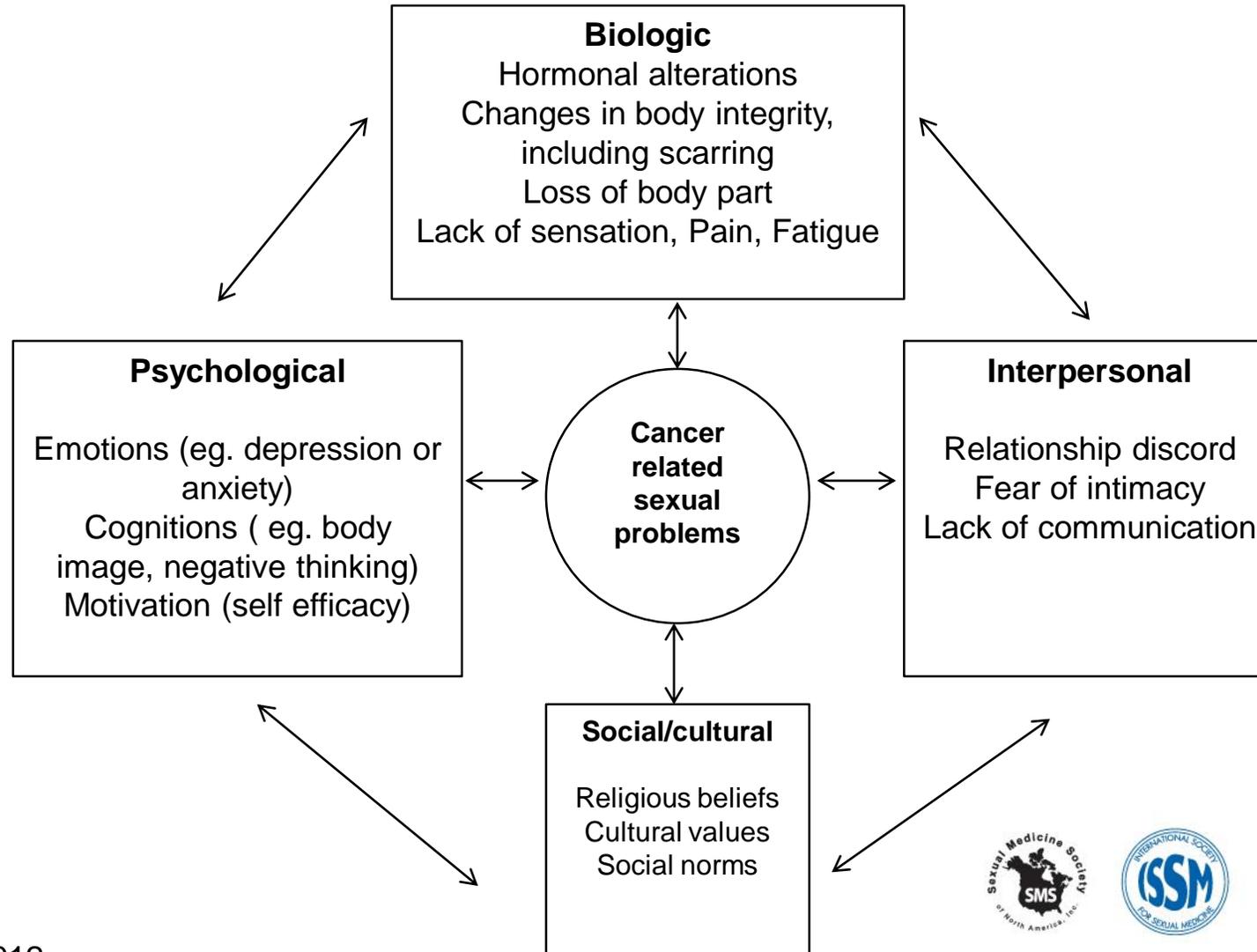
- Sexual health is a state of physical, emotional, mental, and social well-being in relation to sexuality
- Sexual health is not merely the absence of disease, dysfunction, or infirmity
- Sexual health requires a positive and respectful approach to sexuality and sexual relationships
- Sexual health requires the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence
- For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected, and fulfilled



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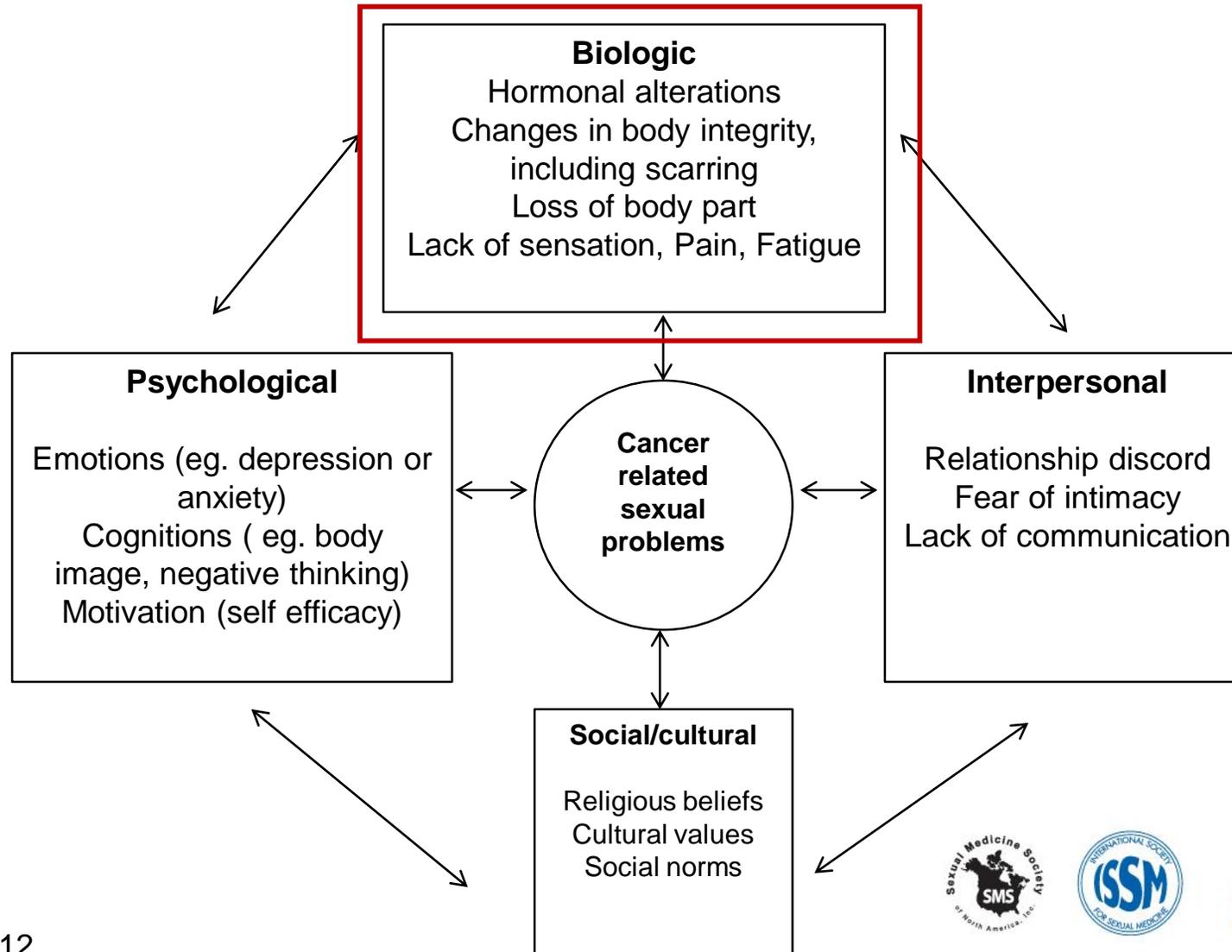
A Biopsychosocial Approach to Sexuality



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Assessments Typically Focus Only on Sexual Function



Definitions: Sexual Function and Dysfunction

- **Sexual Function** is “a temporal sequencing and coordination of several phases, including sexual desire (libido), arousal (excitement), orgasm and satisfaction” (Basson, Berman, Burnett, Derogatis, Ferguson et al., 2000).
- **Sexual Dysfunctions** are “the various ways in which an individual is unable to participate in a sexual relationship as he or she would wish”, including lack or loss of sexual desire, . . . failure of genital response (erectile dysfunction, rapid ejaculation, poor vaginal lubrication), orgasmic dysfunction, vaginismus, dyspareunia and excessive sexual drive (Vroege, Gijs, & Hengeveld, 1998).



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Sexual Function Assessment

- **Female Sexual Function Index (FSFI)** (Rosen, J Sex Marital Ther, 2000)
 - Domains: Desire, Arousal, Lubrication, Orgasm, Satisfaction, Pain
- **International Index of Erectile Function (IIEF)** (Rosen, Urology, 1997)
 - Domains: Erectile function, Orgasmic function, Sexual Desire, Intercourse satisfaction, Overall satisfaction
- **Expanded Prostate Cancer Index Composite (EPIC)** (Wei, Urology, 2000)
 - Domains: Urinary incontinence, Urinary Irritation, Sexual, Bowel, Hormonal



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Sexual Function Assessment

Satisfaction with Sex Life
Vaginal Lubrication for Sexual Activity
Vaginal Discomfort with Sexual Activity
Erectile Function
Vulvar Discomfort with Sexual Activity – Labial
Vulvar Discomfort with Sexual Activity – Clitoral
Oral Discomfort with Sexual Activity
Oral Dryness with Sexual Activity
Orgasm – Pleasure
Orgasm – Ability
Interest in Sexual Activity
Bother Regarding Sexual Function
Factors Interfering with Sexual Satisfaction
Therapeutic Aids for Sexual Activity
Sexual Activities
Anal Discomfort with Sexual Activity
Sexual Function Screener Items

Patient Reported Outcome Measurement Information System (PROMIS)

Flynn K.E., Weinfurt K.P. "Development and Validation of the PROMIS Sexual Function Measure." Presentation at the Duke Translational Medicine Institute Annual Research Career Day; May 20, 2011; Durham, NC, USA.



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Prevalence of Sexual Dysfunctions in Men and Women Aged 40-80 – African Countries are Missing!

N = 27,500 from 29 countries

TABLE II. Age-standardized prevalence of sexual dysfunctions by country cluster for sexually active subjects

Sexual Dysfunction	Northern Europe	Southern Europe	Non-European West	Central/South America	Middle East	East Asia	South East Asia	Total
Men								
Early ejaculation	10 (9–11)	13 (12–15)	16 (14–17)	22 (19–25)	8 (7–10)	19 (17–21)	25 (22–29)	14 (14–15)
Erection difficulties	8 (7–9)	8 (7–9)	11 (10–13)	9 (6–11)	8 (6–10)	15 (13–17)	22 (18–25)	10 (9–10)
Lack of interest in sex	7 (6–8)	6 (5–7)	9 (8–11)	9 (7–11)	13 (11–15)	12 (11–14)	20 (17–23)	9 (9–10)
Inability to achieve orgasm	5 (4–6)	7 (6–8)	8 (7–9)	8 (6–11)	7 (6–9)	10 (9–12)	15 (13–18)	7 (7–8)
Sex not pleasurable	4 (3–5)	5 (4–6)	6 (5–7)	4 (3–6)	8 (6–10)	7 (6–8)	12 (10–15)	6 (5–6)
At least one problem	23 (22–25)	24 (22–26)	29 (27–31)	31 (29–35)	26 (23–28)	34 (32–36)	44 (40–48)	28 (28–29)
Women								
Lack of interest in sex	17 (15–19)	21 (19–23)	19 (17–21)	20 (16–24)	29 (24–34)	27 (25–30)	34 (28–39)	21 (20–22)
Inability to achieve orgasm	10 (9–12)	17 (15–19)	16 (14–17)	16 (13–19)	17 (12–21)	23 (21–26)	34 (29–39)	16 (15–17)
Lubrication difficulties	13 (11–14)	12 (10–14)	19 (17–21)	18 (15–22)	12 (8–16)	28 (25–30)	28 (23–33)	16 (15–16)
Sex not pleasurable	10 (8–11)	15 (13–17)	12 (10–14)	14 (11–17)	22 (17–26)	21 (17–24)	28 (23–33)	15 (14–15)
Pain during sexual intercourse	5 (4–7)	8 (7–10)	8 (7–9)	14 (11–17)	14 (10–19)	20 (18–23)	22 (17–27)	10 (10–11)
At least one problem	31 (29–33)	36 (33–38)	38 (35–40)	38 (34–42)	46 (42–51)	47 (44–50)	55 (50–61)	39 (38–40)

Data presented as percentage, with 95% confidence interval in parentheses.
Countries included in country clusters same as noted for Table I.



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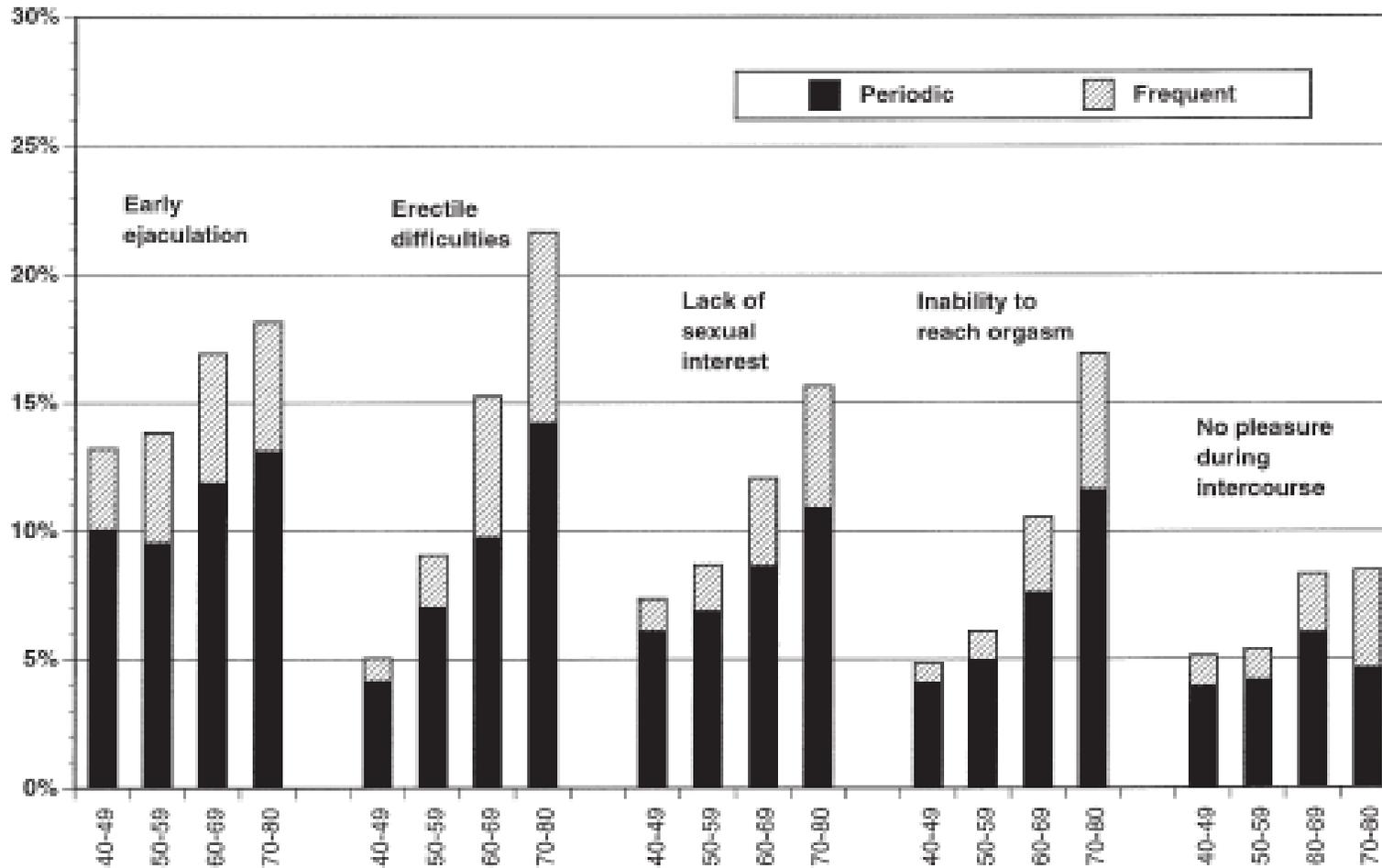
Prevalence of Sexual Dysfunctions in Men and Women Aged 40-80 N = 27,500 from 29 countries

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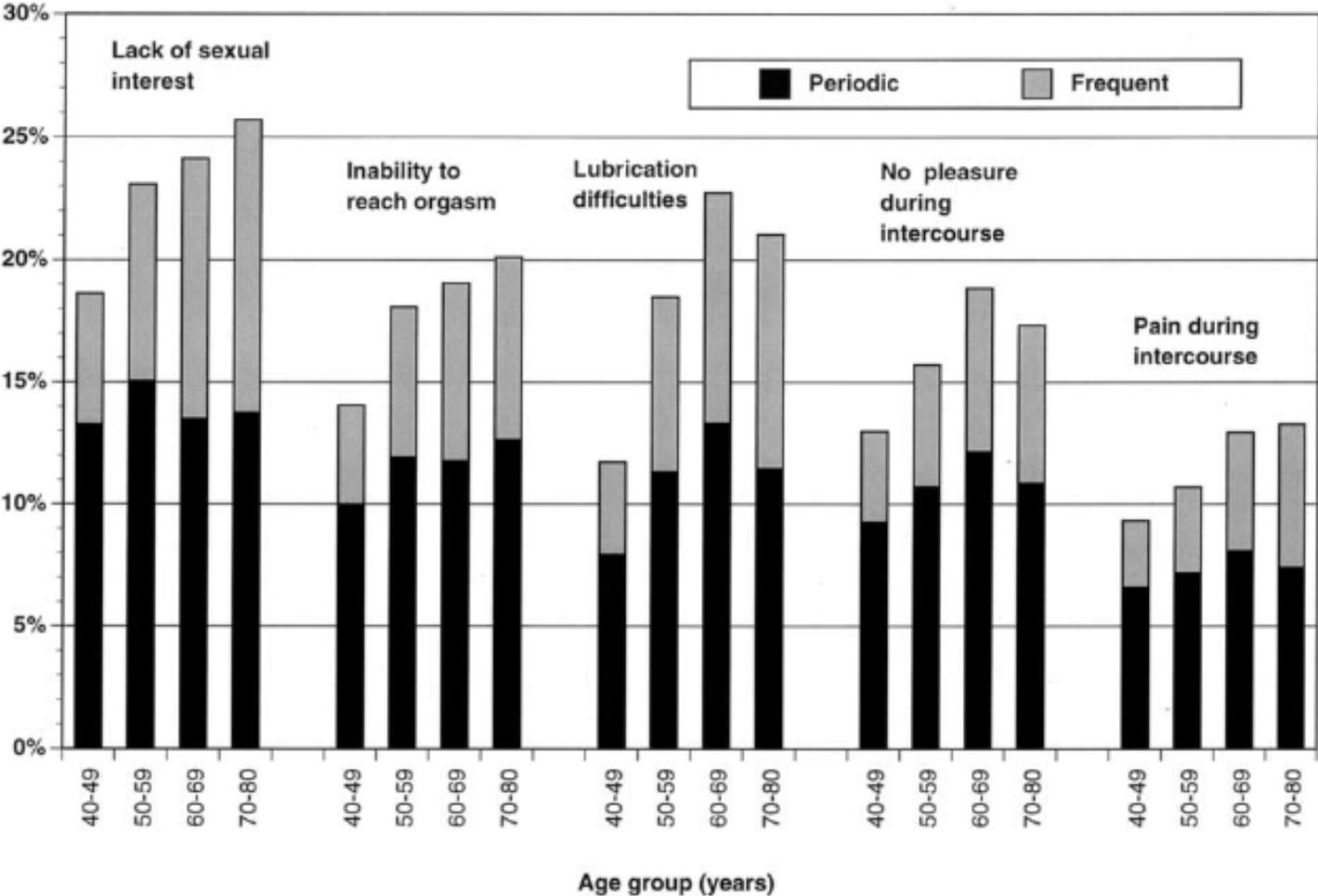
Sexual Dysfunction	Northern Europe	Southern Europe	Non-European West	Central/South America	Middle East	East Asia	South East Asia	Total
Men								
Early ejaculation	10 (9-11)	13 (12-15)	16 (14-17)	22 (19-25)	8 (7-10)	19 (17-21)	25 (22-29)	14 (14-15)
Erection difficulties	8 (7-9)	8 (7-9)	11 (10-13)	9 (6-11)	8 (6-10)	15 (13-17)	22 (18-25)	10 (9-10)
Lack of interest in sex	7 (6-8)	6 (5-7)	9 (8-11)	9 (7-11)	13 (11-15)	12 (11-14)	20 (17-23)	9 (9-10)
Inability to achieve orgasm	5 (4-6)	7 (6-8)	8 (7-9)	8 (6-11)	7 (6-9)	10 (9-12)	15 (13-18)	7 (7-8)
Sex not pleasurable	4 (3-5)	5 (4-6)	6 (5-7)	4 (3-6)	8 (6-10)	7 (6-8)	12 (10-15)	6 (5-6)
At least one problem	23 (22-25)	24 (22-26)	29 (27-31)	31 (29-35)	26 (23-28)	34 (32-36)	44 (40-48)	28 (28-29)
Women								
Lack of interest in sex	17 (15-19)	21 (19-23)	19 (17-21)	20 (16-24)	29 (24-34)	27 (25-30)	34 (28-39)	21 (20-22)
Inability to achieve orgasm	10 (9-12)	17 (15-19)	16 (14-17)	16 (13-19)	17 (12-21)	23 (21-26)	34 (29-39)	16 (15-17)
Lubrication difficulties	13 (11-14)	12 (10-14)	19 (17-21)	18 (15-22)	12 (8-16)	28 (25-30)	28 (23-33)	16 (15-16)
Sex not pleasurable	10 (8-11)	15 (13-17)	12 (10-14)	14 (11-17)	22 (17-26)	21 (17-24)	28 (23-33)	15 (14-15)
Pain during sexual intercourse	5 (4-7)	8 (7-10)	8 (7-9)	14 (11-17)	14 (10-19)	20 (18-23)	22 (17-27)	10 (10-11)
At least one problem	31 (29-33)	36 (33-38)	38 (35-40)	38 (34-42)	46 (42-51)	47 (44-50)	55 (50-61)	39 (38-40)

Data presented as percentage, with 95% confidence interval in parentheses.
Countries included in country clusters same as noted for Table I.

Prevalence of Sexual Dysfunctions by Age in Men



Prevalence of Sexual Dysfunctions by Age in Women



Individual Studies



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Sexual Dysfunctions among Pre-menopausal Women

- **Prevalence and risk factors** in a meta-analysis of 95 studies, included Western, Asian, Australian, Middle-Eastern, African contexts (McCool, Sex Med Rev, 2016, BMC,2918)
- 40.9% (95% CI) prevalence
- hypoactive sexual desire (28.2%) and lubrication (20.6%) difficulties were most significant
 - risk factors : poor physical health, poor mental health, stress, abortion, genitourinary problems, female genital cutting, relationship dissatisfaction, sexual abuse, and being religious
 - protective factors: older age at marriage, exercising, daily affection, intimate communication, positive body image, and sex education
- **Sexual Dysfunction** in 384 women of childbearing age in a hospital in Nigeria (Fajewonyomi, J Health Popul Nutr, 2007)
 - 63% had sexual dysfunction
 - pain with intercourse (22.7%), orgasm (63.6%)
 - main reasons - uncaring partner (81.4%), inadequate foreplay (33.1%), competition among wives in a polygamous family (33.1%)



Sexual Dysfunction in Married Women who Experienced Genital Cutting in Kenya

- Female genital cutting (FGC) is practiced by most communities, not by the Luo, Luhya, Pokomo, Teso and Turkana
- FGC may include a cliterectomy, infibulation (removing clitoris and labia, stitching edges of vulva together to prevent intercourse, labia pulling and piercing, cauterization)
- **Study:** 318 Kipsigi women, living in Mauche area, Nakuru county
 - 3 groups: cut before marriage, after marriage, not cut
- Mean age = 30.59 ± 7.36 years, 74% had primary education, 71% were farmers
- Age, number of children and education were predictors of sexual functioning
- Uncut women had better sexual functioning, timing of cutting did not predict function, women who were cut had statistically significantly lower desire, arousal, orgasm and satisfaction

Erectile Dysfunction Among Arianal Men of Northern Kenya

- **Study:** 198 aged 20 and older, assessed with the IIEF
- ED increases with age, significantly so after age 60
- Body mass index was positively associated with ED
- ED was negatively related to right hand grip strength (proxy for overall health) and to the number of the man's wives
- Co-morbid conditions were not associated with ED

Data from Sub-Saharan Africa

- Culturally, sexual issues are not easily admitted to in African countries or easily brought up by providers, but the advent of PDE-5 inhibitors has opened the door to those discussions
- **Study:** 212 male patients (median age 46, range 31-68), seen at a tertiary hospital in Nigeria, were assessed with IIEF
 - 19% had erectile dysfunction (ED) associated with age, income, partner complaint, abdominal surgery, alcohol use
 - 36% never discussed it with a healthcare provider, 31% felt it was not necessary to discuss it
 - Over 19% thought someone else was responsible, 7% thought wife was unfaithful, 2.3% thought witchcraft was responsible
 - 7.1% took PDE-5i's at least once, 21% took herbal remedies, 69% sought no help

Sexual Dysfunctions in the US

TABLE 2. Age-standardized prevalence (%) of sexual dysfunctions among the sexually active subjects of the Anglophone population of the Global Study of Sexual Attitudes and Behaviors 2001–2002, by country (95% confidence intervals in parentheses)

	USA	Canada	UK	Australia	New Zealand	Total
Men						
Early ejaculation	13 (10–15)	9 (6–12)	13 (10–16)	16 (13–19)	29 (22–36)	14 (13–15)
Erection difficulties	10 (8–13)	7 (4–11)	13 (10–16)	16 (13–20)	25 (18–32)	11 (10–13)
Lack of interest in sex	6 (4–8)	5 (3–7)	11 (8–14)	11 (8–14)	15 (9–21)	8 (7–10)
Inability to achieve orgasm	6 (4–7)	5 (3–8)	11 (8–13)	8 (5–10)	16 (10–21)	7 (6–8)
Sex not pleasurable	4 (3–6)	3 (1–4)	8 (5–10)	5 (3–8)	15 (9–20)	6 (5–7)
At least one dysfunction	25 (22–29)	18 (14–22)	31 (27–35)	41 (36–46)	51 (43–58)	28 (26–29)
Women						
Lack of interest in sex	12 (9–15)	11 (7–15)	22 (17–27)	23 (19–27)	35 (27–44)	19 (17–21)
Lubrication difficulties	14 (11–18)	12 (8–16)	14 (10–18)	21 (17–26)	36 (27–44)	17 (15–18)
Inability to achieve orgasm	12 (9–15)	11 (7–15)	14 (10–18)	15 (12–19)	28 (21–36)	15 (13–16)
Sex not pleasurable	9 (6–12)	9 (5–12)	15 (11–19)	12 (9–16)	23 (16–29)	12 (11–13)
Pain during sexual intercourse	5 (4–7)	7 (4–10)	11 (7–15)	6 (4–8)	18 (10–25)	8 (7–9)
At least one dysfunction	32 (27–36)	28 (23–34)	43 (37–48)	41 (36–46)	57 (48–66)	37 (34–39)

Predictors of Sexual Dysfunction in the US

- Age
- Lower educational level – lack of education about sexuality
- Being single
- Emotional problems, stress
- History of trauma, especially sexual trauma
- Co-morbid conditions: diabetes, hypertension, cancer, obesity
- Smoking
- Excess alcohol use



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The Impact of Sexual Dysfunction on Men, Women, Partners and Couples

- Men feel distress, loss of masculinity, loss of confidence, unrecognized grief
- Women distress, loss, embarrassment, fear of rejection, grief
- Partners are distressed because sexual relationship has changed, loss and grief
- Couples often do not have coping skills for problemsolving sexual problems and do not know where to turn for help

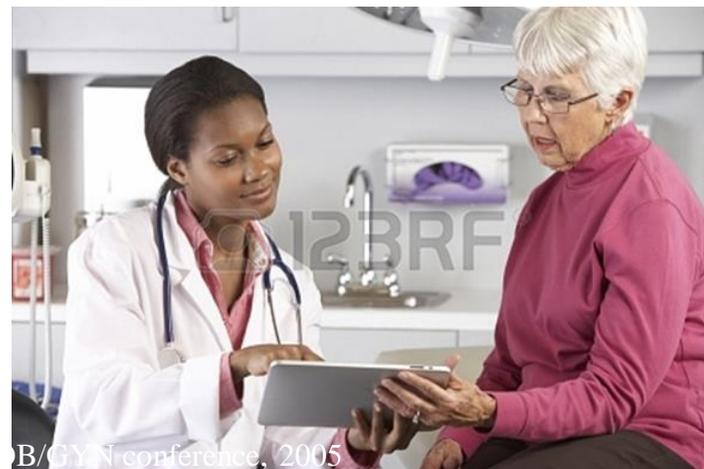


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Help-seeking for Sexual Problems

- **76% men** and **80% women** do not seek help for sexual problems
- Patients report discomfort asking physicians about sexual health concerns
- Physicians report discomfort approaching sexual health topics



Matthews Nichols et al., OB/GYN
conference, 2005
Marwick, JAMA, 1999



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Sexual Health Framework in the US: Improving Patient Care and Public Health

(Satcher, Hook & Coleman, JAMA 2015)

- **Emphasis on wellness** - combat the silence and stigma that often compromise efforts to address this important area of health.
- **Focus on positive and respectful relationships** - Sexuality is a fulfilling, pleasurable, integral part of life for many individuals. Positive and respectful relationships have been shown to be protective factors for multiple health issues.
- **Acknowledgement of sexual health as a part of overall health** - By acknowledging the effect of sexual health on overall health, the sexual health framework can encourage more holistic health interventions and elevate the importance of this critical area.

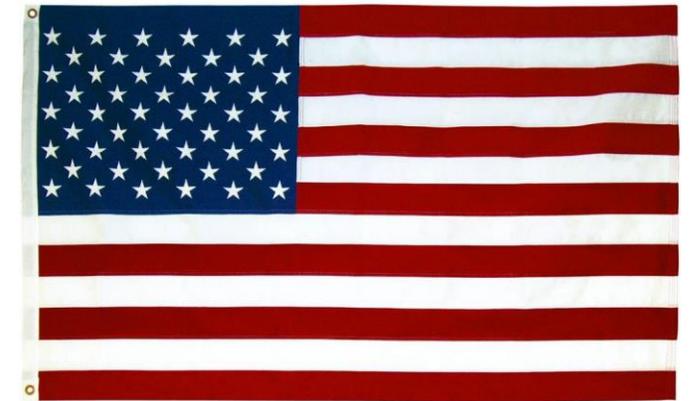
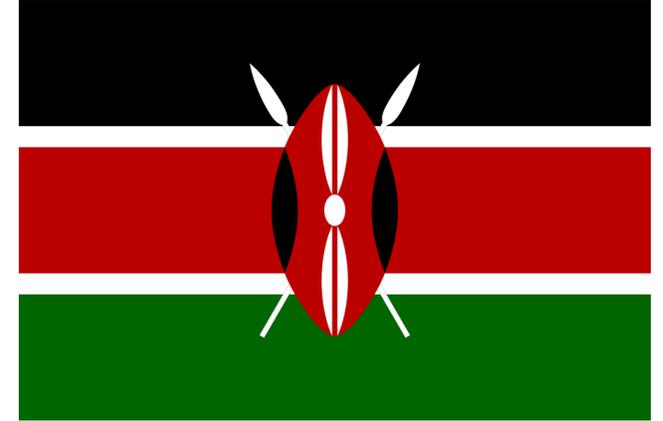


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Take Home Points

- Sexual health is a part of general health – it is a public health issue
- Sexual dysfunction is under-studied globally
- Research on the impact of sexual dysfunction on individuals and relationship is needed
- Cultural contexts must be understood
- Questions to be answered:
 - How does sexual health fit into healthcare priorities?
 - Where will funding for sexual health research come from?
 - What facilitates and hinders including sexual health assessment and rehabilitation in the provision of healthcare?
 - How can the healthcare workforce be trained in sexual health?



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Thank You

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