PRIMEVIEW

VULVODYNIA

nature reviews disease primers

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Vulvodynia — that is, pain in the vulva without an identifiable cause — can occur spontaneously or with touch during sexual and non-sexual situations. The term dyspareunia refers to pain during intercourse only, which can include vulvodynia (if pain is localized to the vulvar region) or deeper pelvic pain.

EPIDEMIOLOGY

Estimates of the lifetime prevalence from individual countries or regions suggest that vulvodynia is a common gynaecological pain condition that is prevalent among women of all ages. Studies in the USA have found that up to 16% of women experience vulvodynia during their lives and that 7–8% of women will have experienced symptoms consistent with vulvodynia by 40 years of age. The incidence of vulvodynia is highest in younger women, with one study finding an annual incidence of 7.6% at 20 years of age.

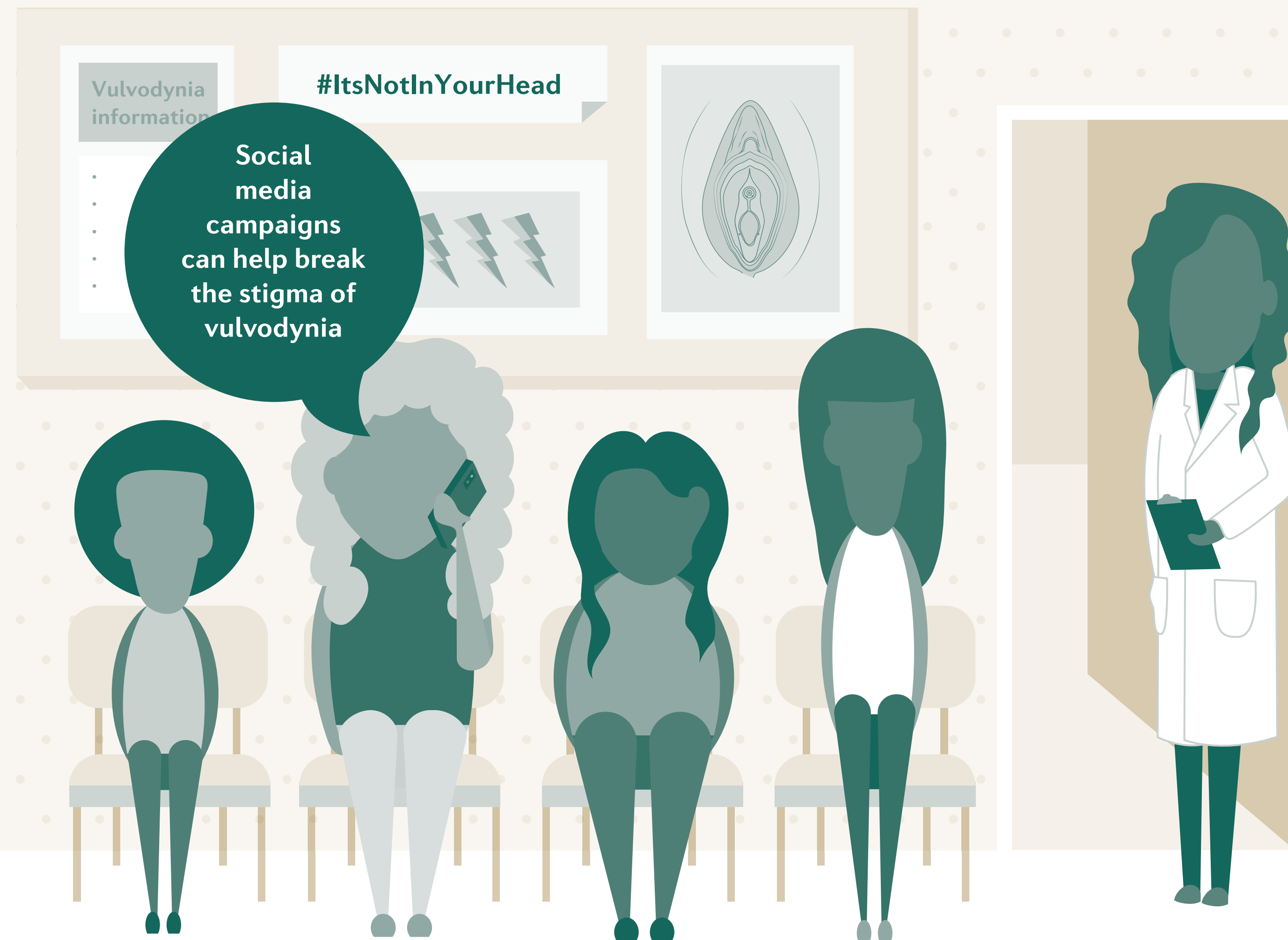
DIAGNOSIS

All women with symptoms of vulvar discomfort should be evaluated for vulvodynia. Alongside medical history taking, pelvic examination should assess the external appearance of the vulva and vulvar sensitivity (using a cotton swap to exert light pressure on the vulva, labia and hymenal remnants to see if pain is elicited). Additionaly, a specimen of vaginal discharge or wall moisture should be obtained during pelvic examination, which is used to examine vaginal yeast and pH, and for microscopic evaluation to rule out *Candida* infection and genital symptomatology of menopause.

OUTLOOK

Vulvodynia is under-researched and under-funded

Educating the general public about the symptoms of vulvodynia is needed to promote awareness; this education could include posing questions about the presence of vulvovaginal symptoms during medical visits, or school-based and clinic-based strategies discussing genital symptoms and disorders



Chronic pain and sexual health are generally neglected areas of medical training, and physicians and mental health workers should undergo further training to improve diagnosis and awareness of vulvodynia

QUALITY OF LIFE

Many women with vulvodynia have a reduced quality of life owing to effects on work, social and interpersonal activities and sleep. Vulvodynia can be associated with a high emotional burden due to distress associated with missed diagnoses, a lack of medical assistance and altered interpersonal communication with friends and partners.

The economic burden of vulvodynia is substantial and has been estimated to cost $31–72 billion annually in the USA

MECHANISMS

Vulvodynia has a multi-factorial aetiology, encompassing both biological and psychosocial factors. These factors can contribute to vulvodynia development, chronicity or exacerbation and occur at different timecourses of the disorder.

BIOMEDICAL FACTORS
- Altered pain processing
- Inflammatory factors
- Autonomic dysfunction
- Hormonal alterations
- Muscle dysfunction
- Developmental factors
- Genetics

PSYCHOSOCIAL FACTORS
- Relationship factors
- Sexual motivation
- Attachment
- Mood
- Pain catastrophizing
- Childhood maltreatment

MANAGEMENT

Multiple treatment types are used for vulvodynia, either individually or in combination. Pelvic floor physical therapy and psychosocial interventions (such as cognitive behavioural therapy, education and pain management) are recommended as first-line treatments. Pharmacological therapies include topical lidocaine, tricyclic antidepressants, anticonvulsants and botulinum toxin, although their efficacy has been assessed in only a small number of randomized controlled trials. Some women with refractory vulvodynia can benefit from vestibulectomy (surgical removal of the vestibule mucosa, hymenal remants and opening of Bartholin ducts).

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