# Obsessive-compulsive disorder and men's health. Part 1: Recognition and diagnosis

**Dario Conti,** Resident in Psychiatry;[1,2] **Luca Pellegrini,** Psychiatrist and Research Fellow;[2,3] **Maham Riaz,** Resident in Psychiatry;[2] **David Mpavaenda,** Psychotherapist;[2,3] **Alex Sim,** Psychotherapist;[2] **Naomi Fineberg,** Professor of Psychiatry[2,3,4]

1. University of Milan, Italy; 2. Hertfordshire Partnership University NHS Foundation Trust, UK; 3. University of Hertfordshire, Hatfield, UK; 4. School of Clinical Medicine, University of Cambridge, UK

**Obsessive-compulsive disorder (OCD) commonly affects males and can manifest with a range of urological symptoms directly linked to the content of the OCD, including urinary urgency, urinary frequency, urinary retention and sexual dysfunction. Accurate recognition of OCD in such cases is fundamental to avoid misdiagnosis, risks to patients associated with untreated OCD (including suicidal behaviour), unnecessary physical health investigations and delayed treatment. In Part 1 here, the authors discuss the recognition and diagnosis of OCD. Part 2 will consider its treatment.**

## Key points

- Although OCD is a relatively common chronic debilitating disease, it is poorly recognised and undertreated
- Obsessive-compulsive symptoms often manifest internally rather than externally and patients may be reluctant to reveal thoughts or behaviours
- OCD is a disorder of considerable relevance to men's health and wellbeing, including their urological health
- In males OCD can manifest with a range of urological symptoms directly linked to the content of the OCD, including urinary urgency, urinary frequency, urinary retention and sexual dysfunction
- The Zohar-Fineberg Obsessive Compulsive Screen (ZF-OCS) is a useful screening tool
- Delayed treatment is associated with significantly poorer treatment outcomes and increased ill-health burden
- Clinicians in general, including urologists, should be aware of the suicide risk associated with OCD, especially in those with severe obsessions

Obsessive-compulsive disorder (OCD) is a common and often severe form of mental illness[1] accompanied by intense distress, a high level of disability and impaired social and occupational functioning.[2] OCD affects 1.3–2.3% of the general population,[2] and according to the World Health Organization, represents one of the 10 most disabling mental health disorders due to loss of income and decreased quality of life.[3] The age of onset is usually in childhood or early adulthood[4] and the illness tends to run a chronic, lifelong course. However, lesser obsessive-compulsive syndromes, involving obsessions or compulsions that are less distressing or disabling, are even more common, affecting up to 20% of the general population, and share the same incidence and course as OCD, suggesting that a spectrum of severity of obsessive-compulsive syndromes exists in the general population, with the potential for individuals to shift in severity, *ie* from symptom to syndrome to disorder depending on circumstances.

OCD is somewhat over-represented in females (female:male ratio approximately 1.5:1);[5] however, males tend to report an earlier onset of obsessive-compulsive syndromes and disorder, which can lead to a greater impact on several areas of daily life, including interpersonal relationships.[6] For these reasons, it is not surprising that men with OCD are more frequently single, unemployed and live with their original families.[7] Moreover, family studies of OCD suggest that early-onset OCD may be associated with an increased familial risk of OCD, highlighting a greater genetic contribution.[8]

Although the burden of OCD to an individual, their family and society as a whole is considerable,[9] the disorder is often not recognised either in primary health care or secondary care psychiatry settings.[10] In fact, obsessive-compulsive symptoms often manifest internally rather than externally and patients may be reluctant to reveal thoughts or behaviours due to shame, embarrassment or fear of sanction. This is particularly problematic for those suffering with sexual obsessions (see below). Consequently, there may be a delay between the onset of the disturbance and the onset of treatment, which can adversely affect the clinical outcome.[11] Moreover, emerging evidence suggests that the prevalence of OCD among the general population and the severity of obsessive-compulsive symptoms may be increasing in the

wake of the COVID-19 pandemic, possibly owing to prolonged exposure to statutory reinforcement of safety behaviours.[12] Therefore, it is increasingly important for clinicians in general to be aware of the diagnosis and feel confident to sensitively enquire about it.

Considering the substantial population prevalence and the fact that obsessions and compulsions relating to genitourinary functions are well established (see below for details), OCD is a disorder of considerable relevance to men's health and wellbeing, including their urological health. Moreover, the principal forms of pharmacological treatment for OCD – high-dose selective serotonin reuptake inhibitors (SSRIs) or the tricyclic antidepressant clomipramine – are frequently associated with sexual dysfunction, including erectile impotence. Whereas a few consumer-focused organisations have produced educational material about OCD for male readers, few if any publications have focused on those presentations of OCD that are either specific to or most commonly seen in males or those relating to urological symptoms, and the existing medical literature mainly consists of a few case reports of OCD related to urinary frequency.[13]

In this article we present an update on OCD, with particular reference to male presentations that might lead to urological consultation, to equip clinicians with the knowledge and skills to recognise and manage this pervasive disorder. This first part focuses on recognition and diagnosis of OCD. The second part will focus on treatment of OCD.

## The disorder

OCD is a chronic debilitating disorder. The cardinal symptoms comprise obsessions – recurrent, unwanted and distressing intrusive thoughts, urges or images and compulsions – defined as repetitive behaviours or mental acts an individual feels driven to perform according to rigid, stereotyped rules that are designed to reduce or prevent anxiety or distress caused by obsessions or to prevent harm.[14] To qualify for a diagnosis, the obsessions or compulsions must significantly interfere with a person's work and/or social functioning.

| Common obsessions | Common compulsions |
|---|---|
| • Fear of harm (*eg* being responsible for causing harm to others)<br>• Fear of being affected by or passing on contamination (*eg* from germs, dirt, bodily fluids, infectious agents, viruses)<br>• Excessive concern with order or symmetry<br>• Obsessions with somatic symptoms<br>• Religious or blasphemous thoughts<br>• Sexual obsessions (*eg* doubt about sexual orientation)<br>• Unwanted thoughts of violence or aggression (*eg* fear of stabbing one's baby, raping a child) | **Behaviours**<br>• Cleaning<br>• Hand washing<br>• Ordering and arranging<br>• Checking<br>• Asking for reassurance<br><br>**Mental acts**<br>• Mental checking<br>• Making mental lists<br>• Counting<br>• Repeating words silently |

Table 1. Common symptoms of OCD[14]

## Common presentations of OCD

Obsessions and compulsions tend to follow common themes. There are two recognised overarching motivations: the need to ensure 'at all costs' that the individual will not be responsible for causing a certain form of harm by excessively engaging in precautionary acts; *or* a more basic need to ensure that certain actions are performed in a way that 'feels right'. Table 1 shows the commonest obsessions and compulsions seen in clinical practice.

Studies have found a degree of sexual dimorphism in the expression of OCD symptoms,[15] with males reporting a greater likelihood of sexual and/or religious obsessions and compulsions, and symmetry or ordering symptoms. Sexual, religious, symmetry and ordering obsessions and compulsions are also reported to be associated with early-onset OCD.

## Diagnosis and classification

OCD is classified in a newly created family of obsessive-compulsive and related disorders (OCRDs in the main international diagnostic systems ICD-11[16] and DSM-5[14]). OCRDs share many clinical characteristics, including the performance of compulsive rituals, and often occur together suggesting shared aetiological mechanisms. Other OCRDs include body dysmorphic disorder (obsessions and compulsions focused on bodily appearance), hypochondriasis (obsessions focused on serious illness with compulsive medical reassurance seeking), hoarding disorder (compulsive acquisition or failure to discard items), olfactory reference disorder (obsessions and compulsions focused on smelling offensive), hair pulling disorder and skin picking disorder. Field studies have indicated that the ICD-11 method of 'group' classification leads to improved recognition by non-specialist clinicians of these often overlooked disorders.[17] It is important for clinicians to be aware of these other disorders and to enquire about them in all suspected cases of OCD, as their presence may affect the care plan.

## OCD presentations of specific relevance to urology

In Box 1, we describe some of the commonest urological presentations associated with OCD.

**Box 1. Forms of OCD presenting with urological sequelae**

- OCD with harm-related symptoms presenting with overactive bladder syndrome (OAB)
- OCD with 'not just right' or perfectionism symptoms presenting with compulsive urges to evacuate the bladder 'perfectly'
- OCD with contamination-related symptoms presenting with dehydration, constipation, urinary retention, faecal impaction, perineal lesions
- OCD with sexual obsessions and compulsions
- OCD with religious obsessions and scrupulosity

Overactive Bladder Syndrome (OAB) is characterised by urinary urgency, usually accompanied by frequency and nocturia, with or without urinary incontinence in the absence of a causative infection or other pathological condition. It is known to commonly manifest with OCD, in which case the primary OCD symptom usually involves the obsession that the bladder feels full and may be associated with an obsessive fear of 'accidentally wetting oneself' (*ie* harm). Associated compulsions include mental checking for the 'full bladder' sensation and frequent visits to the toilet to attempt to urinate, often at night (as per OAB).[18] One study investigating the association between OAB and OCD reported that female patients with OAB were more likely to have OCD traits than the non-OAB control group participants (odds ratio 5.47; $p$=0.001). Checking compulsions were the commonest associated OCD symptoms. These findings suggest that clinicians should consider screening women with OAB for OCD.

Alternatively, OCD may present with an overwhelming urge to evacuate the bladder or bowel 'completely', simply until the internal sensation 'feels right'. Compulsions include staying in the toilet for prolonged periods 'pushing' the pelvic musculature in an attempt to fully evacuate the bladder or bowel, which may occasionally result in physical damage and (based on the authors' clinical experience) has been known to cause rectal prolapse.[19] Such cases may repeatedly seek medical reassurance that their bladder or bowel is functioning normally and are unable to accept medical or surgical reassurance to the contrary, frequently ending up receiving unnecessary somatic investigations.

People with contamination-related OCD will often restrict or avoid eating or drinking in order to reduce their use of the toilet, to avoid catching or passing on germs. They may also avoid sexual intercourse for similar reasons. This avoidant behaviour can lead in severe cases to dehydration, constipation and faecal impaction, urinary retention and even result in evidence of renal damage,[20] and has major consequences for sustaining intimate relationships. Female patients with contamination-related OCD may also present to clinicians with perineal soreness resulting from compulsive douching.

Similar forms of behavioural avoidance or other, sometimes unusual, compulsive rituals may be associated with specific obsessions about being responsible for causing harm via a sexual act. These kinds of obsessions include the exaggerated fear that one is going to commit a taboo or criminal sexual act (*eg* have sex with a child), obsessions about sexual orientation (*eg* am I straight or gay?), fears surrounding sexual/gender identity changes, religious sexual obsessions (scrupulosity), fears about committing a sexual assault, or irrational impregnating fears. An individual with OCD characterised by sexual obsessions and compulsions experiences distressing, *unwanted* thoughts about or urges to commit these behaviours that feel extremely repugnant and shameful, and suicidal behaviour associated with sexual obsessions is common.[21]

Sexual compulsions associated with these thoughts include checking for signs of bodily arousal, intended to disconfirm the obsessional fear. As an example, a father may wear tight trousers to avoid an erection, or might physically check his penis when he is around children or other males in an attempt to reduce the risk of losing control. Females may check their genitals for fear of signs of increased lubrication. These precautionary behaviours may be misconstrued as indicating sexual desire and arousal. However, it should be reiterated that the contrary applies – the sexual behaviour is unwanted and feared by the individual with the compulsion. High levels of distressing doubt and uncertainty, resulting in significant behavioural avoidance, are common and can become extremely disabling, so that, for example, parents will avoid intimate contact with their children, *eg* avoid changing nappies, bath times, sitting on knees, etc. Such presentations require extremely sensitive clinical management. It is important to explain to patients that they do not actually represent any increased sexual risk to others. Crucially, OCD involving sexual obsessions and/or compulsions is not an indication to invoke safeguarding or other formal risk management procedures, which are only likely to exacerbate OCD and distress.[22] However, some cases may be complex, and in case of doubt it is reasonable to seek a specialist psychiatric opinion (see below for a description of compulsive sexual behaviour disorder – an impulse control disorder that is not directly related to OCD).

When religious thoughts become intrusive and distressing, a diagnosis of OCD may be considered. Thinking too much about moral purity, intrusive blasphemous thoughts, compulsive prayers, unwarranted concern about committing a sin, alongside compulsive cleaning, washing or other religious rituals are sometimes referred to as 'scrupulosity' and would indicate a strong likelihood of OCD.[23] The person with scrupulosity experiences intense guilt and worry, and may take extreme measures to reduce distress such as perfectionistic repetition of prayers or confessions, frequent reassurance-seeking from religious advisors, avoiding situations that evoke doubts or excessively repeating cleansing and purifying rituals. They could, for example, consider urination as a blasphemous act and deliberately avoid drinking as a way of reducing micturition, which in severe cases could lead to dehydration and chronic renal impairment.[20] Again, cases presenting in this way require extremely sensitive management. It can sometimes be helpful to engage support from a trusted religious leader.

These clinical presentations may have a potential impact on intimate relationships. OCD sufferers have a heightened sense of fear and lack of security, which can manifest itself in the need for constant reassurance from their partner or spouse. The need to constantly validate feelings or intentions could be exhausting and feel futile for the partners. Sexual issues related to OCD may also lead to problems with physical closeness, being touched and overall intimacy issues.

## Comorbidity

Apart from other OCRDs (see above), OCD is frequently accompanied by depression, anxiety, alcohol or substance abuse.[24] Obsessive-compulsive personality disorder (OCPD),

a common personality type involving an exaggerated need for perfection and control at the expense of openness and flexibility, is also frequently associated with OCD. Eating disorders are also common in people with OCD and related disorders, including OCPD, as are different forms of problematic internet use, including gaming disorder.

OCD is known to be associated with brain-based changes in cognitive processing, and therefore it is not surprising that comorbidity with neurodevelopmental disorders is also common, including with Tourette syndrome and other forms of tic disorder, attention deficit hyperactivity disorder and autism spectrum disorder, which are particularly prevalent in males with OCD.

Compulsive sexual behaviour disorder (not to be confused with OCD with sexual obsessions) is not considered a member of the ICD-11 OCRDS. It is a new ICD-11 diagnosis, which is classified with the impulse control disorders, owing to its highly impulsive symptom profile and motivational basis.[16] Unlike OCD, in compulsive sexual behaviour disorder the urge is to *actively* engage in sexual acts (*eg* masturbation, sexual intercourse) to an excessive degree. The sexual activity is initially experienced as rewarding and becomes a primary focus of life, but with time is experienced as overwhelming and out of control. Compulsive sexual behaviour disorder is frequently associated with excessive pornography viewing, usually online, and is a common cause of erectile dysfunction, particularly among young males.[25] It is unusual for OCD and compulsive sexual behaviour disorder to occur together. When they do, specialist clinical advice may be helpful.

## Suicide and OCD

Recent systematic reviews and meta-analyses suggest that individuals with severe or chronic forms of OCD are at increased risk of suicidal behaviour compared with the general population.[26] A recent meta-analysis showed that at least 1 patient out of 10 with OCD attempts suicide during their lifetime, while nearly half of individuals with OCD report suicidal ideation. Moreover, increased suicidality was associated with greater severity of obsessions and depressive symptoms. Clinicians in general, including urologists, should be aware of the suicide risk associated with OCD, especially in those with severe obsessions. It is important to enquire about suicidal ideation in suspected cases, including current plans and personal history of previous suicide attempts, as the latter would predict risk of repetition.

## Improved recognition of OCD

Although OCD is a relatively common disease, it is poorly recognised and undertreated.[27,28] In this respect, it is important to consider how difficult it can be for people with OCD to talk about their symptoms with family, friends and health care professionals. Many people feel guilty, ashamed or embarrassed, especially if they are afraid of harming people, as they fear carrying out their obsessive thoughts or urges. However, once the disorder is recognised, many patients express relief as the diagnosis offers them a rational explanation of their symptoms, eliminates the 'self-diagnosis' of other apparently more serious disorders and facilitates the possibility of treatment and help. A patient's family may also be more understanding about their behaviour if they know it is caused by a recognised medical condition and feel they can be more involved in the patient's treatment programme. One of the most important reasons to recognise OCD early is the fact that delayed treatment is associated with significantly poorer treatment outcomes and increased ill-health burden, including increased rates of hospitalisation. Greater awareness in the general population and in the health sector is therefore the ultimate key to better recognition and treatment of OCD.

However, people with more severe forms of OCD frequently lack insight into their condition and truly believe they are likely to cause others harm through engaging in criminal behaviour such as that of a psychopath or paedophile. As a result they may fear punishment or censure or being stigmatised in the workplace or with family or friends. For these reasons, discussions around the diagnosis need to be undertaken with considerable sensitivity.

## Screening and assessment

To detect OCD, several tools have been developed for use in non-specialist settings. The Zohar-Fineberg Obsessive Compulsive Screen (ZF-OCS)[28] consists of five short questions designed to be administered by a doctor or nurse and takes less than one minute to administer (Figure 1). Given its brevity and usefulness, it can be considered a useful screening tool. A positive endorsement of any of the five questions should prompt a more detailed clinical evaluation.

As an alternative, the self-report Obsessive Compulsive Inventory-Revised (OCI-R)[29] is one of the most commonly used scales for OCD.[30] It consists of a brief, 18-item self-report questionnaire (each item is rated 0 to 4, according to degree of associated distress) that measures symptoms across six key OCD domains – washing, checking, neutralising, obsessing,

These questions are designed to screen for the presence of obsessive-compulsive disorder. Please tick the response you think is correct.

| | Yes | No |
|---|---|---|
| 1. Do you wash or clean a lot? | | |
| 2. Do you check things a lot? | | |
| 3. Is there any thought that keeps bothering you that you would like to get rid of but can't? | | |
| 4. Do your daily activities take a long time to finish? | | |
| 5. Are you concerned about orderliness or symmetry? | | |

A positive response to any of the above questions suggests further inquiry may be advisable.

Figure 1. Zohar-Fineberg Obsessive Compulsive Screen (ZF-OCS)[28]

ordering and hoarding. The presence of OCD is suggested by the detection of scores greater than or equal to 21 (out of 72) on the questionnaire. The OCI-R has also been shown to be sensitive to the effects of treatment on symptomatology, making it additionally useful as an outcome measure across primary and secondary care and for clinical trials.

In outpatient clinics likely to attract patients with OCD whose illness might otherwise be missed (such as urology), it may be advisable to briefly screen those patients with presentations that show a reasonable likelihood of being OCD-related (see Box 1) for undiagnosed OCD, *eg* using either of the above instruments. If the screening is positive, a more detailed enquiry may reveal the disorder, in which case an assessment of OCD-related risks, including the risk of suicide, should routinely be made. Identified cases should probably then be referred onwards, depending on clinical severity and local health service configurations, either to their GP or to a more specialised psychiatry centre to further characterise the clinical syndrome and ensure adequate treatment.

## Conclusions

OCD commonly affects males and can manifest with a range of urological symptoms directly linked to the content of the OCD, including urinary urgency, urinary frequency, urinary retention and sexual dysfunction. Accurate recognition of OCD in such cases is fundamental to avoid misdiagnosis, risks to patients associated with untreated OCD (including suicidal behaviour), unnecessary physical health investigations and delayed treatment. Along with routine physical examination and tests, urologists should consider the possibility of OCD in patients presenting with these symptoms, especially in those cases for whom a physical cause cannot easily be found. Use of a brief screening assessment (such as the ZF-OCS) may help clinicians recognise the disorder and facilitate appropriate onwards referral and management.


## Acknowledgement

We acknowledge Janine Hopkins for her help in co-ordinating the clinical authorship team and our patients from whom we learn so much and whose experiences we have drawn on to produce this work.


## Declaration of interests

*Drs Conti, Pellegrini, Riaz, Mpavaenda and Sim have nothing to disclose related to the present work. Professor Fineberg has been a member of the WHO advisory group on obsessive-compulsive disorders. In the past three years she has held research or networking grants from the UK NIHR, EU H2020, Orchard; she has accepted travel and/or hospitality expenses from the BAP, ECNP, RCPsych, CINP, International Forum of Mood and Anxiety Disorders, World Psychiatric Association; she has received payment from Elsevier for editorial duties; she has accepted a paid speaking engagement in a webinar sponsored by the Global Mental Health Academy. Previously, she has accepted paid speaking engagements in various industry-supported symposia and has recruited patients for various industry-sponsored studies in the field of OCD treatment. She leads an NHS treatment service for OCD. She holds board membership for various registered charities linked to OCD. She gives expert advice on psychopharmacology to the UK MHRA and NICE.*

## References


1. Wing JK. Sec 13 Severe Mental Illness. In: Stevens A, Raftery J, Mant J, Simpson S, eds. *Health Care Needs Assessment*. First Series, Volume 2, Second Edition. London: CRC Press, 2004.
2. Veale D, Roberts A. Obsessive-compulsive disorder. *BMJ* 2014;348:g2183.
3. World Health Organization (WHO). The 'newly defined' burden of mental problems. Fact Sheets 217. Geneva: WHO, 1999.
4. Anholt GE, Aderka IM, van Balkom AJ, *et al*. Age of onset in obsessive-compulsive disorder: admixture analysis with a large sample. *Psychol Med* 2014;44:185–94.
5. Fineberg NA, Hengartner MP, Bergbaum, *et al*. A prospective population-based cohort study of the prevalence, incidence and impact of obsessive-compulsive symptomatology. *Int J Psychiatry Clin Pract* 2013;2013:170–8.
6. Benatti B, Girone N, Celebre L, *et al*. The role of gender in a large international OCD sample: a report from the International College of Obsessive-Compulsive Spectrum Disorders (ICOCS) Network. *Compr Psychiatry* 2022;116:152315.
7. Sobin C, Blundell M, Weiller F, *et al*. Phenotypic characteristics of Obsessive-Compulsive Disorder ascertained in adulthood. *J Psychiatr Res* 1999;33:265–73.
8. Eichstedt JA, Arnold SL. Childhood-onset obsessive-compulsive disorder: a tic-related subtype of OCD? *Clin Psychol Rev* 2001;21:137–57.
9. Vats T, Fineberg NA, Hollander E. The future of obsessive-compulsive spectrum disorders: a research perspective. *Curr Top Behav Neurosci* 2021;49:461–77.
10. Glazier K, Calixte RM, Rothschild R, *et al*. High rates of OCD symptom misidentification by mental health professionals. *Ann Clin Psychiatry* 2013;25:201–9.
11. Dell'Osso B, Camuri G, Benatti B, *et al*. Differences in latency to first pharmacological treatment (duration of untreated illness) in anxiety disorders: a study on patients with panic disorder, generalized anxiety disorder and obsessive-compulsive disorder. *Early Interv Psychiatry* 2013;7:374–80.
12. Fineberg NA, Pellegrini L, Wellsted D, *et al*. Facing the "new normal": how adjusting to the easing of COVID-19 lockdown restrictions exposes mental health inequalities. *J Psychiatr Res* 2021;141:276–86.
13. Jiwanmall SA, Kattula D. Obsessive-compulsive disorder presenting with compulsions to urinate frequently. *Indian J Psychol Med* 2016;38:364–5.
14. American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders*. Fifth Edition. Arlington, VA: APA, 2013.
15. Benatti B, Celebre L, Girone N, *et al*. Clinical characteristics and comorbidity associated with female gender in obsessive-compulsive disorder. *J Psychiatr Res* 2020;131:209–14.
16. World Health Organization. ICD-11: International classification of diseases 11th Revision (https://icd.who.int/en; accessed 14 November 2022).
17. Kogan CS, Maj M, Rebello TJ, *et al*. A global field study of the international classification of diseases (ICD-11) mood disorders clinical descriptions and diagnostic guidelines. *J Affect Disord* 2021;295:1138–50.

18. Rezaeimehr MR, Zargham M, Jahanabadi Z, *et al*. Association between lower urinary tract symptoms (LUTS) and obsessive-compulsive disorders (OCD) in women: a study based on urodynamic findings and micturition problem. *Neurourol Urodyn* 2022;41:357–64.
19. Stambo U, Conn K, Drummond LM. Obsessive Compulsive Disorder and rectal prolapse. *Eur Neuropsychopharmacol* 2016;26:888.
20. Drummond LM, Boschen MJ, Cullimore J, *et al*. Physical complications of severe, chronic obsessive-compulsive disorder: a comparison with general psychiatric inpatients. *Gen Hosp Psychiatry* 2012;34:618–25.
21. Dell'Osso L, Casu G, Carlini M, *et al*. Sexual obsessions and suicidal behaviors in patients with mood disorders, panic disorder and schizophrenia. *Ann Gen Psychiatry* 2012;11:27.
22. Veale D, Freeston M, Krebs G, *et al*. Risk assessment and management in obsessive–compulsive disorder. *Adv Psychiatr Treat* 2009;15:332–43.
23. Deacon B, Nelson EA. On the nature and treatment of scrupulosity. *Pragmat Case Stud Psychother* 2008;4:39–53.
24. Abramowitz JS. Treatment of obsessive-compulsive disorder in patients who have comorbid major depression. *J Clin Psychol* 2004; 60:1133–41.
25. Berger JH, Kehoe JE, Doan AP, *et al*. Survey of sexual function and pornography. *Mil Med* 2019;184:731–7.
26. Pellegrini L, Maietti E, Rucci P, *et al*. Suicidality in patients with obsessive-compulsive and related disorders (OCRDs): a meta-analysis. *Compr Psychiatry* 2021;108:152246.
27. Hollander E, Stein DJ, Kwon J, *et al*. Psychosocial function and economic costs of obsessive-compulsive disorder. *CNS Spectrums* 1997;2:16–25.
28. Fineberg, NA, Roberts A. Obsessive compulsive disorder: a twenty-first century perspective. In: Fineberg NA, Marazziti D, Stein DJ, eds. *Obsessive Compulsive Disorder: a Practical Guide*. London: Martin Dunitz, 2001;1–13.
29. Foa EB, Huppert JD, Leiberg S, *et al*. The Obsessive-Compulsive Inventory: development and validation of a short version. *Psychol Assess* 2002;14:485–96.
30. Jónsson H, Hougaard E, Bennedsen BE. Randomized comparative study of group versus individual cognitive behavioural therapy for obsessive compulsive disorder. *Acta Psychiatr Scand* 2011;123:387–97.