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Psychiatry Research Case Reports 2 (2023) 100085

Contents lists available at ScienceDirect

Psychiatry Research Case Reports

journal homepage: www.elsevier.com/locate/psycr

A new form of checking obsessive-compulsive disorder in physicians: Another consequence of the COVID-19 pandemic. A case series

María M. Hurtado [a,*], María Macías [b], José Miguel Morales-Asencio [c]

[a] Mental Health Unit, Regional University Hospital, Málaga, Spain, Instituto de Investigación Biomédica de Málaga (IBIMA)
[b] Mental Health Unit, Regional University Hospital, Málaga, Spain
[c] Universidad de Málaga, Faculty of Health Sciences, Málaga, Spain, Instituto de Investigación Biomédica de Málaga (IBIMA)

ARTICLE INFO

Keywords:
Obsessive-compulsive disorder
Mental health of physicians

ABSTRACT

The current article provides information that facilitates early identification of a new form of checking obsessive-compulsive disorder (OCD) detected in physicians during the COVID-19 pandemic. This article describes three cases of professional checking OCD in physicians. Physicians with checking OCD are obsessively concerned about making a mistake that will result in fatal consequences. The most frequent strategies of neutralization include avoiding direct contact with patients by taking sick or vacation leaves; compulsively studying for many hours daily (neglecting other aspects of life); checking the status of their patients by arranging additional follow-up consultations or making phone calls even out of working hours; repeatedly checking the medical history of their patients, and persistently recalling the last appointment. Physicians with check OCD often seek reassurance from their colleagues and consult the scientific literature for information about issues they used to be competent in. These patients may also experience anticipatory anxiety and mental blocks. However, egodystony is milder than in other forms of OCD. The COVID pandemic may have exacerbated these neutralization behaviors, since it has forced physicians to adapt to a new work environment. The recommended treatments (Exposure with Response Prevention Therapy or/and SSRI) provide beneficial effects in a short time.

Introduction

The demand for mental health care from health professionals has increased, because of the COVID-19 pandemic (Charney et al., 2020; Preti et al., 2020; Zhang et al., 2020). The symptoms most frequently detected in healthcare personnel during the pandemic have been anxiety, depression, and insomnia (Braquehais et al., 2020; Luo et al., 2020; Trumello et al., 2020; Zhang et al., 2020). However, some studies have also reported that physicians presented a higher prevalence of severe OC symptoms than the general population in this period (Ferreira et al., 2021).

Contamination, order, repetition or checking are themes very frequent in OCD. Perhaps the best-known topics are contamination and cleanliness. In these cases, patients fear infecting themselves or infecting other people with a germ and to avoid this, they prevent touching the places they consider contaminated and if they do it, they wash their hands compulsively, even with abrasive products. The issue of ordering things is also frequent, by which the patient must order the utensils in a determined way, usually following a symmetrical order, to avoid misfortunes, for example, that a child has an accident and could die. In these cases, the person is aware that there is no logical connection between these two events. In the repetition theme, the person is driven to perform some actions a certain number of times to avoid some misfortune or bad luck, for example, turning the light off and on a certain number of times, or going through the doors forwards and backwards a certain number of times before definitively entering a room, or even touching some objects or furniture a certain number of times. In the case of the checking theme, the person repeatedly checks some things, frequently at home, to prevent a misfortune from happening, for example, repeatedly checks that the door is closed when leaving the house to prevent theft, that the electrical appliances are unplugged to prevent fires, or that the taps are properly closed, for a flood.

There are some previous descriptions of obsessions in medical undergrade students in the literature (Al-Shatanawi et al., 2021; Torres et al., 2016), even before the COVID-19 pandemic. Specifically, it has been suggested that OCD symptoms are more frequent in medical students than in the general population, especially during the first year of university studies (Torres et al., 2016), and that this may have increased with the COVID-19 pandemic (Al-Shatanawi et al., 2021; Ferreira et al., 2021). However, we are not aware of diagnosed cases in experienced doctors in which the content of the obsessions is focused on their daily work, and the involved neutralization behaviours.

* Corresponding author at: Regional University Hospital, Plaza del Hospital Civil s/n, Málaga 29009, Spain.
E-mail address: mariam.hurtado.sspa@juntadeandalucia.es (M.M. Hurtado).

https://doi.org/10.1016/j.psycr.2022.100085
Received 23 July 2022; Received in revised form 1 December 2022; Accepted 13 December 2022

In our unit, we have witnessed an increase in the incidence of a new form of checking obsessive-compulsive disorder (OCD) in physicians, which was hitherto unreported in the scientific literature. We detected a worrying delay in diagnosis, which deprived patients of early treatment. Fortunately, therapies yielded very positive outcomes. This case series study may provide guidance to mental health and primary care professionals to facilitate early diagnosis and treatment. The three cases have been described following the CARE checklist.

Case A

A 55-year-old woman specialist in Urology. The patient was referred to the outpatient Community Mental Health Unit from the occupational health services of her hospital and had no previous history of mental disorders. Some months before, the patient had been through a very stressful experience where one of her sons was hospitalized in a far-abroad country. She could not help or stay with him due to the pandemic. Although the event solved satisfactorily, she started thinking about how a little mistake can result in fatal consequences or aggressions. Additionally, some months before, she had decided to move to another hospital. She was increasingly concerned about making a mistake with respect to diagnosis or treatment of serious illnesses in her specialty (not relate with COVID-19), which made her anxiety grow. After a sick leave, she consulted the occupational health services of her hospital and requested to be reassigned to an alternative position to relieve her anxiety.

The patient was referred to our Mental Health Unit with a diagnosis of adaptive disorder. When she was evaluated in our unit, she had been on a sick leave for several months to avoid the stressful situation of interacting with patients. As she did not have to deal with patients, she was calm at that moment, since her obsession was centered on the possibility of making a fatal mistake that caused the death to a patient or resulted in an aggression. Because she refused to attend patients, she had been advised to take a sick leave. She was prescribed vortioxetine 50 mg, which caused her headache and was suspended a month later. Then, she was prescribed mirtazapine 15 mg –which she did not start– and was referred to our unit. At two months, she was discharged by the medical inspector and started to experience anticipatory anxiety with associated tachycardia before every workday. She was tense and with symptoms of physiological hyperactivation when attending to her patients. The patient repeatedly reviewed the medical histories of the patients of the day, persistently recalled visits, phoned patients to continue or repeat clinical examination, and occasionally scheduled unnecessary appointments. On several occasions, she returned to the hospital out of her working hours to check some medical records. Additional checking is interpreted as compulsive behavior.

After every workday, the patient felt exhausted because of the physiological hyperactivation she experienced at work. After a few weeks, she took her annual leave and requested a new sick leave to avoid the anxiogenic situation.

At our center, she was prescribed sertraline 50mg and lorazepam 1mg, if needed. The patient was subsequently referred to a psychologist and was diagnosed with OCD. She received psychoeducation about OCD and learned about the maintaining role of avoidance behavior and compulsive checking. She was informed about the psychological approach recommended for this disorder i.e. Exposure and Response Prevention (ERP) Therapy. She was provided guidance about the behaviors that made fear persist, i.e., avoidance of the anxiogenic situation through sick and vacation leaves, persistent checking, calling patients on the phone, and arranging unnecessary visits, to name a few. The patient refused to receive any psychological and/or pharmacological treatment. Six months later, return to work emerged as the only feasible option, and she was recommended to resume sertraline and attend psychotherapy. A month after resuming treatment, she changed her mind and requested discharge against medical advice. She worked four days and took a new vacation leave, although she had agreed to expose to the anxiogenic situation. By this time, ERP therapy sessions focused on response prevention since, during the pandemic, physicians could remotely access the medical histories of their patients from outside the hospital. After a few weeks, she felt tense during visits, but the fear of making a fatal mistake decreased significantly. Now, five months after her return to work, compulsive checking has decreased and only occurs at working hours. Generally, the patient shows a normal work functioning.

Case B

A 36-year-old woman who works as a pediatrician at a primary care center. She was referred to our Mental Health Unit one a month and a half after the beginning of the lockdown because of COVID-19 pandemic. At that moment, the situation was dramatic, health professionals were not provided with adequate protection equipment and were not familiar with this type of situation.

The patient did not have an individual or familial history of mental disorders. She received a diagnosis of generalized anxiety disorder by her family doctor, who prescribed lorazepam and recommended the patient to consult the mental health unit. She experienced mental blocks at work, something that she had never had before, after more than 10 years of professional practice. She attended patients in the morning (at that moment, telephonically) and worked as an on-call pediatrician in a hospital several days monthly. She worked some days at her primary care center, whereas on others she tele-worked from home. In the afternoons, she studied the COVID-19 protocols of different countries and reviewed the medical histories of her patients. She called parents out of her working hours to make an additional check or ask about the status of the child. She neglected other aspects of her life. Most of the time, she studied COVID-19 protocols until she felt asleep. Although her concert began focused on COVID-19, it later became general to any potential serious illnesses in children.

On her first visit to our Mental Health Unit, the psychiatrist deprescribed benzodiazepine and replaced it with venlafaxine 75R, and mirtazapine 15 mg mirtazapine to treat insomnia and poor appetite. In parallel, the patient started to see a clinical psychologist, whose sessions were telephonic during the first months. The patient was recommended to keep working at the primary care center but suspend on-call shifts temporarily. During sessions with the psychologist, the patient received psychoeducation about OCD and learned about the maintaining role of avoidance, compulsive checking and reassuring behaviors. This way, the psychologist helped her identify the behaviors (functional analysis) that were contributing to maintaining her disorder. She was encouraged to engage in an ERP Therapy.

One month after the interventions had started, the patient experienced a moderate improvement. She stopped reviewing the medical histories of her patients out of working hours, and limited to two hours the time she devoted to studying COVID-19 protocols of other countries. Anxiety decreased notably and mental blocks at work or out of home disappeared. Symptoms improved even though the situation of uncertainty at work persisted.

Two months later, the patient experienced a significant improvement, which was maintained after the dose of mirtazapine was reduced. Three months later, the patient could work on-call shifts successfully. A month later, mirtazapine was suspended and the patient remained asymptomatic despite the successive waves of the pandemic. Venlafaxine was suspended and the patient has remained asymptomatic since then.

According to the CARE checklist, the next table shows the patient‘s perspective on the received treatment (Table 1).

Case C

A 48-year-old man who works as an out-of-hospital emergency physician. Some months before his referral to the mental health unit, the patient had decided to change to another service. Although his work performance and adaptation was good, it was a very demanding position,

Table 1
Perspective of B patient on the received treatment.

- In March 2020 the pandemic exploded... and my mind with it. After several weeks of not being able to sleep, continuous changes in protocols, absence of protective material, fear of infecting myself, fear of infecting my loved ones... the situation overwhelmed me and I decided to ask for help.
- I had my first telephone consultation with the Mental Health Unit before 24 hours. Initially they focused the situation on an anxious-depressive problem, but after three interviews and with the implicit difficulty to making a diagnose by phone, without a face-to-face assessment, they oriented my diagnosis to OCD. They associated venlafaxine with my treatment, which, together with psychotherapy with a clinical psychologist and a psychiatrist, helped me getting out of that situation. After two months of telephone sessions, we were finally able to make the first face-to-face visit. The treatment was always wonderful, but much more effective when it was provided in a face-to-face approach.
- After 15 months of treatment, we agreed to begin the medication withdrawal. What was supposed to take a few weeks was extended to almost 3 months due to a SSRI discontinuation syndrome.
- The diagnosis and treatment were perfect and I currently lead a completely normal life, both personally and at work.

and the patient decided to move to an ambulatory care center. With the outbreak of the pandemic, the patient started to experience high levels of anxiety. No familial or personal medical history of interest. The patient has supportive family and friends.

During the first visit to our unit, the patient reported high levels of anxiety, continuous ruminative thinking; and repeatedly checking medical records at work and at home (where he had remote access) with respect to several severe illnesses (unrelated with COVID-19). He devoted more a more time to studying and consulted his colleagues on issues he was competent in but which he now felt uncertain about. Additionally, he had developed hypochondriac thoughts about the possibility that a relative had a severe disease. He was in a low mood, with mild anhedonia. However, when he was not at work, he could get away and moderately enjoy the activities he used to like in the past. The patient experienced a mild weight loss and did not show sleep problems.

Following the initial examination by the psychiatrist, he was recommended to increase the dose of the antidepressant he had been taking in the last month (duloxetine, from 90 to 120mg) and was referred to the clinical psychology service to start ERP therapy. He was discouraged from taking a sick leave because of the risk that avoidance behaviors would be perpetuated.

During clinical psychology sessions, the patient received psychoeducation that helped him understand how obsessive thoughts work and the role that repeated checking plays. He received guidance about how to identify compulsive behaviors such as avoidance and escape behavior, which contributed to maintaining his disorder.

In a few weeks, the patient experienced a significant improvement; obsessive thoughts, compulsive checking and anxiety disappeared and the patient had a normal mood. Six months after the improvement of symptoms, the dose of duloxetine started to be progressively reduced. At present, the patient is receiving a dose of 30mg and remains asymptomatic. Presumably, the drug will be suspended during the next visit.

Discussion

In most cases of checking OCD, there is a trigger factor, such as the disease of a loved one, a change of position at work, or the pandemic itself. These situations were stressful for the patients, and generated feelings of uncertainty and fear. However, in none of these three cases sere there COVID-19 infections of their own or from family members that precipitated the disorder, nor was there a significant change in the workload since none of them was in charge of the first line care of COVID-19 patients.

According to the trigger factors and previous history of each subject, once the OCD process has started, some situations become anxiogenic. Such is the case of dealing with patients and assuming responsibility for their diagnosis and treatment, especially in the context of significant uncertainty generated by the COVID-19 pandemic. These situations cause anxiety because they are associated with the patient's obsessions and activate them involuntarily and automatically. In the cases reported here, the patients experienced obsessive thoughts about whether they could have missed some important detail and such mistakes could be life-threatening for their patients. Obsessions are characterized by persistent thoughts that subjects recognize as a product of their mind, but do not understand that are the product of their reasoning. Based on our observations, egodystonia may be more moderate, as compared to other forms of OCD. Thought is ego-dystonic when the person feels that he or she is incoherent or is not in tune with his or her own person, and way of being. As a consequence, they sometimes think, that these self-perceived thoughts are illogical. This characteristic makes that the thought is experienced with a certain strangeness, and differently from other thoughts. Otherwise said, the patient may consider these thoughts as illogical or may not have that feeling at all.

Then, the subject evaluates his/her obsessions. Here, these thoughts are the product of their own reasoning, such as in: "If I've made a mistake, the patient can die and that would be terrible," "if the patient gets worse, he will attack me...", "Is it safe for my patients that I'm the person responsible for their treatment if I feel so insecure?." The severity of this type of reflection about their obsessions is determined by how concerning or inacceptable this reflection is for the subject. These reflections generate substantial emotional pain and, frequently, guilt.

Since this feeling is extremely stressful, subjects develop strategies of neutralization that include avoiding the anxiogenic situations (i.e. they avoid seeing patients by taking sick/vacation leaves, among other strategies); adopting compulsive behaviors or rituals that include compulsive checking (they repeatedly review the medical histories of their patients, repeatedly review medical protocols...); and seeking reassurance (they consult their colleagues on clinical cases they perfectly know how to manage; calling their patients unnecessarily; and by arranging unnecessary appointments, among other strategies).

These strategies of neutralization are aimed at seeking refuge from their fears, which make angst drop away and provide temporary relief. Because of this feeling of relief, patients believe that these strategies are effective and beneficial for them and use them whenever the process starts again, until these behaviors occur automatically. The limitation in this process lies in that these strategies are effective in the short term, but make fears persist in the long term. The repeated use of these strategies leads the subject to think that excessive cautions are effective in preventing the dreaded event (i.e. causing the death of a patient), which makes the fear increase in the long term. The OCD process itself prevents the patient from realizing that standard protocols alone safeguard the safety of patients, and that additional checking is not necessary (Table 2).

In this sense, the COVID-19 pandemic has forced healthcare professionals to adapt to a new environment, which makes them more prone to developing this type of OCD. For example, the digitalization and integration of medical histories make it possible for health professionals to repeatedly review histories remotely. The implantation of telephonic consultations due to the COVID pandemic may have also played a role in the development of this process since it makes it possible for physicians to call their patients anytime to make a check and/or seek reassurance, which was not as frequent in the past. During the pandemic, consultations with colleagues also became more frequent among physicians (possible reassurance seeking). Otherwise said, the flexibilization of the

Table 2
Main components of OCD treatment used in this case series.

Approach	Components	What does it consist of?
ERP Therapy (In case B, a telephone-based approach was used because a generalised COVID 19 lockdown had been imposed)	Assessment: functional analysis	During the assessment it is essential to identify the types of neutralisation behaviour presented, in order to intervene appropriately.
	Psychoeducation on the functioning of OCD and explanation of the therapy	ERP is strongly counterintuitive, and therefore it is very important to convey a good understanding of how OCD works and of the logic underlying the tasks included in the therapy.
	Construction of the exposure hierarchy	All the anxiogenic situations identified are listed and the coping difficulty determined is graded from 1 to 10.
	ERP	ERP begins with the easiest items. Exposure means that the situation generating anxiety is not avoided or escaped from (in this case, the physicians are not on sick leave, and continue with their daily clinical activity). Response prevention refers to the fact that the person does not perform neutralising behaviour in response to the outcome of the functional analysis (hence there are no additional checks of medical records, no further reassurance calls to patients, no more questions addressed to colleagues, no additional (unnecessary) appointments, no additions to an already busy study schedule, and no mentally repetitive reconsideration of the medical consultation). In other words, no steps are taken to reduce the anxiety currently being experienced. For this purpose, records of ERP sessions are normally used.
	ERP monitoring	The ERP and its effects on the frequency and intensity of the obsessions are reviewed, with special attention to the duration of the sessions, and to whether particular types of neutralisation behaviour have or have not been replaced by others.
Pharmacotherapy	SSRI, NSRI	Sertraline (SSRI), Venlafaxine, Duloxetine (NSRI) are compatible with and enhance the effect of ERP therapy.
	Clomipramine	Clomipramine should be considered when there is no response to SSRI or NSRI, although in the reported cases this was not necessary.
	Do not use anxiolytic drugs during ERP	Exposure techniques require attentional commitment and are less effective if performed under the influence of anxiolytics or alcohol.

Table 3
Strategies of neutralization of the obsession to make a mistake with fatal consequences (not necessarily related with COVID 19) in medical checking OCD.

Strategies of neutralization	Behaviours
Avoiding	Sick or vacation leaves. Request a second activity that does not involve direct contact with patients.
Compulsive checking	Repeatedly review the medical records, also during rest hours. Repeatedly review medical protocols. Mentally review what happened during the visit over and over again.
Reassurance	Phone their patients unnecessarily, also during rest hours. Arrange unnecessary appointments. Consult their colleagues on clinical cases they perfectly know how to manage.

working conditions of physicians due to the COVID-19 pandemic may have favored the development of these disorders.

Conclusion

In the years before the pandemic, only a case of checking OCD with this topography of behaviors was recorded in our unit. A family doctor who lived near the hospital and went daily to emergency care in her free time to review the medical histories of her patients, until she started to experience mental blocks every morning before going to work. The changes to healthcare practice brought about by COVID-19 have resulted in three cases of OCD among physicians in less than a year, which represents a significant increase (Table 3).

The treatment of choice for OCD is ERP Therapy, in its different modalities according to each case. When the first-line treatment fails, SSRIs are recommended (National Institute for Health and Care Excellence, 2005, 2019). In the three cases described here, the two approaches were used. However, none of the three cases reviewed in this paper (neither the previous case reported before the pandemic) were diagnosed early but were identified as more unspecific disorders such as GAD and adaptive disorder, to name a few. Failure to determine early diagnosis hinders early treatment and management. When a correct diagnosis of OCD is established and the patient receives an appropriate therapy, these patients improve notably, and their working functionality returns to normality.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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