Obsessions of Child Murder: Underrecognized Manifestations of Obsessive-Compulsive Disorder

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Obsessive-compulsive disorder (OCD) is a common illness that remains underdiagnosed and undertreated. Disturbing obsessions of violence are a frequent manifestation of OCD, related to overattribution of meaning to passing thoughts, a sense of overresponsibility, and concurrent confessing rituals to decrease related anxiety. These intrusive thoughts can include infanticidal or filicidal obsessions in new parents. There is little to no evidence to suggest that these thoughts pose a significant risk of harm, which is reflected in related professional treatment guidelines. In this study, we sought to examine the recognition and risk management preferences among psychiatry professionals and trainees regarding a case example description of filicide obsessions as a manifestation of OCD. A questionnaire regarding a case marked by filicide obsessions was emailed to psychiatrists and psychiatry residents. Respondents provided their preferred and differential diagnoses, reporting their perceptions of risk and optimal case management. Of the 43 respondents, only 62 percent considered OCD in the differential diagnosis. Those considering OCD in the differential diagnosis assessed risk of harm as being lower than did those who did not consider it (3.7 versus 6.6; \( F_{(1,36)} = 12.18; p < .005 \)). Despite this result, the majority of respondents included involuntary admission (60%) and reports to child welfare authorities (68%) among their preferred management strategies. This survey supports our contention that greater awareness of OCD and understanding of management strategies is needed among psychiatrists and trainees. As well, a greater awareness of the low risk of violence associated with this population is necessary to avoid penalizing individuals with OCD-related aggressive and infanticidal obsessions.


Obsessive-compulsive disorder (OCD) is one of the most common psychiatric disorders, with a lifetime prevalence of one to three percent. It is also among the most impairing, as the World Health Organization lists it among the 10 most disabling medical conditions. Yet patients with OCD frequently avoid seeking treatment because of feelings of guilt and shame about their symptoms. Even then, they are often misdiagnosed, resulting in a reported mean six-year lag preceding accurate diagnosis (not dissimilar to other major psychiatric disorders). Thus, despite its prevalence, OCD remains clinically underrecognized.

In OCD, intrusive obsessions of violence and aggression are quite common, occurring in 28 to 50 percent of patients. These violent and aggressive thoughts are, by definition, considered inconsistent with one’s desires and extremely disconcerting. In contrast to the large majority (>80%) of the population who experience intrusive, unpleasant, or unwanted thoughts in their lifetime and interpret them as meaningless, OCD-affected individuals attribute special meaning to such thoughts, believing that they will act on them against their will or that having the thought is as bad as committing the act.

Aggressive obsessions present as thoughts, images, or impulses that are strongly resisted and experienced as inappropriate, causing marked anxiety. They may include disturbing graphic images or thoughts of stabbing or decapitating a child or a spouse. Com-
pulsions that are associated with these obsessions include repeated checking to make sure that no violence has occurred or attempting to save future victims by confessing the thoughts to professionals and overstating the risk of harm. Although those affected by OCD frequently do not seek treatment, the presence of violent obsessions is significantly associated with consulting a physician for OCD symptoms.9

When patients present to psychiatrists with thoughts of killing their children or family members, diagnostic and management challenges abound. The reporting of infanticidal or filicidal obsessions by patients often triggers anxiety and confusion in physicians themselves, coloring the clinician’s perceptions and decision-making processes.

Obsessions of infanticide and violence are not uncommon, although little attention has been paid to these symptoms in the recent literature. The diagnostic challenges associated with obsessions of infanticide have been discussed by several authors in the historical literature, using diagnostic terminology that is now outdated. In 1959, Chapman10 gave a detailed description of 20 women and 2 men presenting with obsessions of infanticide by stabbing, decapitation, and strangulation. Their fears of going insane and acting on the disturbing obsessions often led to avoidance or checking behaviors. All of these patients were treated as outpatients and diagnosed as neurotic, with no report of depression or schizophrenia. In the same year, Anthony classified a case series of 12 “murderous mothers” into distinct groups of “obsessional neurotics” and “explosive psychopaths” with “free-floating aggression” (Ref. 11, p 3). Fein-stein described six mothers with infanticidal impulses as being on a diagnostic continuum between “obsessional neurotics” and “borderline psychotics” (Ref. 12, p 885).

In the more recent and largest case series related to infanticide obsessions, Button and Reivich13 reported 42 of 1,317 consecutive psychiatric patients at a university medical center presenting with this symptom. Seventeen (40%) had concurrent thought disorganization, inappropriate affect, and impaired reality testing and received a diagnosis of schizophrenia. Eleven (26%) were given a diagnosis of depression, with two of these having psychotic features. Finally, seven (16%) were given a diagnosis of OCD. Thus, the most frequent diagnoses associated with presenting obsessions of infanticide include schizophrenia, depression, and OCD. Careful diagnostic scrutiny is needed to determine proper treatment planning.

Although OCD is frequently considered to be a chronic disorder, there are multiple reports of acute postpartum onset of OCD.14–18 This phenomenon can be characterized by obsessions of infanticide or violence in new mothers15–17 and also in new fathers.18 Some women with chronic OCD symptoms are particularly vulnerable to the worsening of OCD during reproductive events.19

However, OCD with violent thoughts is sometimes mistaken for a psychotic disorder, particularly in the postpartum period.20 Complicating the diagnosis, postpartum depression can have comorbid anxiety with associated aggressive ideation21 and pathological fears of the infant’s death.22

Physicians may find it distressing when patients disclose thoughts of killing their children. A recent study of psychiatrists found that they underestimate the frequency of thoughts of child harm among depressed mothers,23 which could lead to reticence in questioning patients about the presence of these thoughts. Even in cases of OCD-related infanticide obsessions where risk is in the low range, there may be a perception that these patients will act on their thoughts. However, there is currently a body of literature contradicting this assumption. Cases of child murder in psychiatric samples have some common overlapping characteristics including depression, psychosis, and limited social support; however, OCD is not one of these characteristics.24

There is a relative lack of reports of violence occurring in OCD alone. Despite a high prevalence rate of OCD and a high rate of violent obsessions, there are virtually no reports in the literature of patients with OCD who act violently. A single case report describes a patient, affected by an obsession with symmetry, who gouged out another person’s eye;25 of note, in this case, there were no anxiety-provoking or ego-dystonic obsessions of violence, suggesting that OCD was not the cause. Centers with large OCD populations reiterate the notion that patients with OCD who have obsessions of violence do not act on them,26 although there has been no large published series with evidence in this regard.

Some evidence suggests that obsessions and OCD are actually protective against violent actions; in fact, significantly fewer suicide attempts occur in adults27 and children28 who have OCD without comorbid...
conditions. Although OCD has been traditionally associated with lower suicide risk, Torres et al. suggested that OCD can be associated with suicidality, although they opined that it is linked more to comorbid conditions than to OCD.

Finally, at a psychopharmacologic level, the lack of violence in patients with OCD may be explained by differences in serotonin metabolism and 5-HIAA (5-hydroxyindoleacetic acid), a major metabolite of serotonin correlated with serotonin turnover. Low levels of 5-HIAA have been associated with increased rates of violence, impulsiveness, hostility, and suicidality in certain personality-disordered populations, criminal offenders, and arsonists, whereas high levels of 5-HIAA have been observed in those with OCD. Further, a decrease in platelet serotonin and cerebral spinal fluid (CSF) 5-HIAA is associated with decreased OCD symptoms in clomipramine-treated patients.

Patients with OCD may have frequent ego-dystonic obsessions of violence and present with these for treatment. However, the risk management and diagnoses received by these patients may be remarkably varied. The authors were involved in the treatment of two patients with OCD: one who is the subject of the case study presented herein, who presented to the emergency department with obsessions of infanticide and aggression and was successfully managed as an outpatient, and another who was involuntarily hospitalized with involvement of child protection authorities, after having an initial evaluation that did not consider OCD as a possible diagnosis. Given an apparent discrepancy in diagnosis and case management, we presented the first patient’s history, absent the working diagnosis and treatment plan, to psychiatrists and psychiatric trainees in a survey. We hypothesized that psychiatrists and trainees would often miss the diagnosis of OCD and that the misdiagnosis would lead to overly conservative and disempowering management plans for the patient.

Case Study

The patient referred to the emergency department by his family doctor after presenting to the office with a four-day history of thoughts of killing his young daughter and his wife. He described these thoughts as coming “out of the blue.” He said the thoughts were “almost like a vision” in his head, explaining that he saw graphic pictures of stabbing his family with one of the kitchen knives. He had become increasingly worried that he would act on these thoughts. He vehemently denied any wish to harm his child or wife and said that he would not be alone with his child for fear of killing her. When his wife wanted to leave the house for work, he had been overcome with fears of hurting his child with a knife, and, as a result, his wife had taken off several days from her job.

As a result of his distress, the patient had been unable to sleep and had lost his appetite. He denied a depressed mood, but described anhedonia since the onset of his symptoms four days prior. He denied auditory hallucinations. He denied psychotic symptoms, including thought insertion, thought withdrawal, thought broadcasting, and paranoid feelings. He denied any delusions, but he had overvalued ideas that he was going to cause harm to his child.

He was currently experiencing a moderate degree of stress at work, as he was faced with a possible transfer out of the city. The stress was worsened by the possibility that his wife and family would not be able to move with him because of his wife’s job. He was described as a good husband and loving father by his wife. He had no history of violence.

He denied any formal psychiatric history, although he reported that he tended to worry more than other people did, but his worrying did not routinely interfere with his functioning. He also had had occasional panic attacks, which had increased with his current symptoms. He did not fear future panic attacks. He had not experienced any significant trauma. He denied previous worries about germs, symmetry, or safety, and had never had compulsions to wash, organize, or check. He denied any alcohol or drug use. He denied significant periods of elevated or depressed mood.

His family history was unknown. He had a childhood history of possible seizures and more recently had been prescribed amitriptyline 20 mg nightly for myofascial pain. He had stopped this medication two weeks before the onset of his symptoms because it was ineffective.

In the emergency room, the patient was given a diagnosis of OCD and was discharged home with his wife. Child welfare authorities were not contacted. He had close outpatient follow-up over a two-month period that included psychoeducation and six sessions of cognitive behavioral therapy aimed at his
ego-dystonic obsessions. He was also treated with citalopram 10 mg daily, but did not want to increase his dose, fearing potential side effects. Overall, he reported a significant decrease in the frequency and severity of his obsessions. His care was then transferred back to his family physician, where he underwent a full course of cognitive-behavioral therapy with a psychologist. Three years later, he reported that he had discontinued citalopram without any changes in his symptoms. He also completed 10 booster sessions of cognitive-behavioral therapy. He said that he still occasionally experienced symptoms, but that they no longer caused him significant impairment. He never acted violently.

Methods

Approval was obtained from the Royal Ottawa Health Care Group Ethics Review Board. At their recommendation, the patient was contacted indirectly through his own treating family physician a year after his clinical care in our psychiatric facility had ended. He had the opportunity to edit the history to remove any personal information and gave signed consent for using his history in the study and in publication. A survey was emailed to 80 staff psychiatrists and 28 psychiatric residents working at Ottawa's two major hospitals. The survey included the case just described, omitting the diagnosis, emergency management, and subsequent outcome. Respondents were asked to list their preferred diagnosis and top three differential diagnoses. They were asked to rate the violence risk between 0 and 10 (with 0 as no risk and 10 as high risk) and then to describe appropriate management strategies, including whether they would involuntarily admit the patient if he wanted to leave the emergency room. Finally, the respondents were asked whether they would contact the Children’s Aid Society (CAS), Ontario’s child protection agency, if the patient were a single father.

Statistical analysis was performed using SPSS. To assess factors involved in the assessment of risk, we performed a $2 \times 2$ ANOVA with OCD in the diagnosis/differential (yes, no) versus practitioner type (resident or staff). To assess differences in management, we performed chi-square analyses with $2 \times 3$ tables, comparing first by practitioner type then by the presence of OCD in the diagnosis (either as a preferred diagnosis or in the differential). Significant responses were defined as those with a two-tailed $p < .05$.

Of the 43 respondents, 19 were psychiatric residents (first to fifth year of training) and 24 were attending psychiatrists. One resident and two staff surveys were excluded because of familiarity with the case, leaving 18 resident and 22 staff surveys for analysis (38% response rate). Qualified answers, such as “possibly,” were not included in the analysis, leaving 40 in the involuntary-admission analysis, 39 in the voluntary-admission analysis, and 38 in the contact-CAS analysis. In the statistical analyses, those who included OCD in the differential diagnosis were too few for independent group analysis and therefore were combined with those who listed OCD as their preferred diagnosis.

Results

On the whole, there were no significant response differences observed between psychiatry residents and attending psychiatrists (Table 1). Among the 22
staff psychiatrist respondents, 12 were outpatient staff, 6 were inpatient staff, and 4 worked in both settings. The mean number of years in practice was 12.9 (SD 8.60; range, 0.5–26; median, 14). Only half (11/22) of the staff respondents listed OCD as the preferred diagnosis. Two-thirds (15; 68%) listed OCD as either the preferred or differential diagnosis. The majority (14; 64%) stated that they would admit the patient. The major reasons cited for admission were clarification of diagnosis, safety, and crisis intervention. Half (11; 50%) reported that they would admit the patient involuntarily if he wanted to leave the emergency department. Most (14; 64%) stated that they would contact child protective services if he were a single parent. The average risk rating was 4.7 (SD 3.03). Of the subset of 11 psychiatrists listing a diagnosis of OCD, 3 reported that they would involuntarily admit and 4 that they would contact child protective services. The subset of 11 provided a mean risk rating of 3.0 (SD 1.79).

Among resident respondents, all levels of training were represented, including two first-year, five second-year, four third-year, three fourth-year, and five fifth-year residents. Similar to their staff counterparts, half (9/18; 50%) listed OCD as the preferred diagnosis. Ten (56%) listed OCD as either a preferred or differential diagnosis. The majority of trainees (15; 83%) reported that they would admit the patient, citing the same reasons as the staff psychiatrists. The majority (13; 72%) also reported that they would admit the patient involuntarily if he wanted to leave the emergency room. Also similar to the staff psychiatrists, most (13; 72%) reported that they would contact child protective services if he were a single parent. The average risk rating was 5.0 (SD 2.56). Of the nine residents who listed OCD as the diagnosis, six reported that they would involuntarily admit and six that they would contact child protective services. The mean evaluation of risk (by the subset of nine) was 3.9 (SD 2.67). There were no significant differences noted in level of risk or management by practitioner type. There was a nonsignificant trend toward more conservative management by residents compared with staff psychiatrists.

Significant negative relationship was observed between considering OCD in the differential and the estimated level of risk ($p < .005$), indicating that when OCD was considered as a diagnosis, the risk was rated as lower (Table 2). There was a nonstatistically significant trend toward more conservative management if a diagnosis of OCD was not considered.

Finally, there was a statistically significant relationship between estimating risk as higher and using specific safety management strategies (Table 3). Those who recommended psychiatric admission and those who recommended contacting CAS had rated the risk as higher than had those who had not recommended these strategies.

### Discussion

This study supports findings in previous research suggesting that OCD is highly underrecognized, even by psychiatry specialists and trainees. Despite the fact that the provided case example clearly meets all DSM-IV-TR criteria, only half of the staff psychiatrists and residents correctly identified OCD as their preferred diagnosis, and only 68 percent of staff and 56 percent of residents even considered OCD in
their differential diagnosis. As a positive indicator, however, there was a relationship between considering the diagnosis of OCD and rating the risk as lower. Similarly, rating the risk as lower generally led to less conservative risk management strategies. Despite this trend, even when risk assessment was appropriately rated as low, psychiatrists reported that they would still use the more conservative and disempowering risk management strategies for a patient with OCD who has filicidal obsessions, including hospitalization against his will and notifying child protective services.

Our study examined the three central components required by a practitioner when faced with obsessions of infanticide or filicide: proper diagnosis, risk assessment, and appropriate risk management. The first step involves establishing a correct diagnosis when presented with a patient who meets DSM-IV-TR criteria. The current body of literature demonstrates that obsessions of infanticide and filicide occur frequently in OCD, depression, and psychosis. In the absence of depressive or psychotic symptoms, OCD is the most likely diagnosis. Thus, when evaluating a patient with obsessions of infanticide or filicide, a thorough history must be obtained, focusing on the likely diagnoses of OCD, depression, and schizophrenia. Less likely diagnoses may include medical causes, substance use or abuse, or other atypical presentations of illness, particularly if the clinical picture and time course do not match that of the more common diagnoses.

After establishing a diagnosis, an assessment of the risk of violence should follow. There is no support in the literature that ego-dystonic, OCD-related obsessions produce an elevated risk of violence. Contrarily, they may actually reduce risk. Thus, obsessions of infanticide or filicide in the context of OCD alone should be viewed as a low-risk situation. Our survey demonstrated a degree of awareness related to this fact, as physicians who considered OCD as the preferred diagnosis or in the differential assigned a lower risk of violence, independent of their status as a resident or staff psychiatrist.

Finally, physicians should tailor their risk management strategies to the actual degree of existing risk. In contrast to the minimally harmful yet effective management approach taken in our case example, survey respondents were more inclined to remove the rights of OCD patients with infanticidal or filicidal obsessions. As demonstrated in the case report, appropriate OCD management, including treatment with a serotonergic agent and cognitive-behavioral therapy, led to a sustained significant decline of the filicidal obsessions. Our study results reveal that physicians tend to err on the side of caution when managing risk. Even when a diagnosis of OCD was considered and overall risk was rated as being relatively low, a large number of practitioners reported that they would resort to involuntary admission and contacting child protection authorities in efforts to manage risk. There was a statistically significant correlation between finding an individual to be at higher risk and restrictive risk management strategies.

Practitioners may experience significant difficulty in discerning postpartum OCD and postpartum psychosis. The ability to identify the two has significant implications for risk assessment. In female patients, the potential of postpartum psychosis further complicates assessment of violence risk, as four percent of untreated postpartum psychosis cases result in infanticide. Postpartum psychosis is most often an emergent condition, managed on an inpatient unit, where infanticidal thoughts and risk can be further evaluated. Thoughts of harming one’s child are also relatively common among depressed mothers (occurring in 41%), but this condition is underestimated by psychiatrists. By defining the gender of our case example as male, these important differential diagnoses were removed.

### Table 3 Risk Assessment and Correlated Risk Management Strategy

<table>
<thead>
<tr>
<th>Management Strategy</th>
<th>Would Not Use Recommended Strategy, n (risk level, SD)</th>
<th>Would Use Recommended Strategy, n (risk level, SD)</th>
<th>t test, p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admit voluntarily</td>
<td>10 (risk* = 2.5 ± 1.65)</td>
<td>29 (risk* = 5.45 ± 2.66)</td>
<td>t137 = −3.28; p = 0.002</td>
</tr>
<tr>
<td>Admit involuntarily</td>
<td>16 (risk* = 2.59 ± 1.93)</td>
<td>24 (risk* = 6.27 ± 2.28)</td>
<td>t136 = −5.31; p = 0.000</td>
</tr>
<tr>
<td>Contact CAS</td>
<td>11 (risk* = 3.36 ± 2.94)</td>
<td>27 (risk* = 5.54 ± 2.57)</td>
<td>t139 = −2.27; p = 0.029</td>
</tr>
</tbody>
</table>

* Mean ± SD.
NS, not significant.
Risk management by hospitalization or contacting child protective services or both must be performed logically, with consideration of diagnosis, among other factors. Merely reporting homicidal urges should not lead to reflexive clinical decision-making. With specifics depending on the jurisdictional reporting statute, the clinician has a duty to report perceived risk to the child. However, studies demonstrate that pediatricians and even seasoned child abuse professionals differ in their expectations about when the possibility of child risk should be reported.\textsuperscript{40,41} There is certainly much more variability among psychiatrists, who deal with the topic less frequently in their practice. Moreover, when they do, they are often dealing with prediction of future risk rather than assessing for evidence of past perpetration or bruises.

Although physicians are likely to be affected by their medicolegal milieu and there are potential benefits to erring on the side of caution when managing risk, physicians should balance these factors with the potential harm done by these interventions. This balance is important to consider when contacting child protective services, although the decision may also be influenced by legislative pressure, with mandatory reporting to child protective services of potential risks of harm to children. There is a potential harm in this approach that should not be downplayed or ignored. Reporting has the potential to worsen a patient's condition, particularly if he has an anxiety disorder such as OCD. For example, reporting may reinforce the distorted OCD-related belief that having an obsessive thought indicates that one will act on that thought. Knowledge of the potential severe consequences of reporting may decrease the likelihood of truthful reporting of symptoms and presenting for treatment. In reporting to child protective services, there may be misinterpretation of the relation of the physician's concern of possible risk to mean definite risk. We have observed instances when misunderstanding has led to child apprehension, requirement for third-party visits, and substantial legal fees to regain custody. This potential harm has been more extensively reviewed in the literature.\textsuperscript{42} Involuntary hospitalization similarly can bring harm in addition to loss of freedom. The harm can include stigmatization, loss of income and insurability, loss of employment, and stress in relationships. If the actual risk of violence is low, then these harms are difficult to justify and they must be balanced against the fears of medicolegal complications for the physician.

The primary limitations of this survey include its small sample size and limited response rate, which could jeopardize the generalizability of the results. It is difficult to speculate whether respondents would have been more or less likely to manage conservatively than those who did not reply. However, the acquisition of 43 survey responses was certainly large enough to indicate general attitudes. A more systematic and validated risk rating scale may have been preferable for use in this survey, but the authors are unaware of a measure that would be appropriate for use in a survey. Further, this was a survey-of-convenience sample that was conducted by e-mail, which potentially deterred less technically inclined respondents. A final limitation was the inherent difficulty in using a survey design to re-enact clinical decision-making. Respondents expressed a desire for more case information on seizure background, family support, collateral information, medical workup, and mental status. The open-survey format also yielded numerous non-DSM-IV-TR diagnoses. However, the open format was intentionally used to prevent leading the respondents into specific answers.

**Conclusions**

OCD remains a common psychiatric disorder causing severe mental anguish and morbidity that remains underrecognized even by psychiatry specialists and trainees. Many patients with OCD have distressing violent images and thoughts that cause them to seek medical attention after significant delay. When these patients present for treatment, they are frequently misdiagnosed. Despite the high frequency of violent and aggressive thoughts associated with OCD, there is no significant evidence that these individuals are at risk of acting on their obsessions. In fact, some evidence suggests that the presence of OCD is actually protective against aggression. It is important to differentiate patients with OCD from those who have depression or psychosis, where the presence of violent obsessions heralds a risk that should not be ignored.

An actual case of a patient with OCD who presented with anxiety-provoking violent images as the primary symptom was described to psychiatrists and trainees. Survey results related to the preferred diagnosis, risk assessment, and risk management of this
patient supported the previous observation that OCD remains underrecognized. There appears to be some awareness that these patients are in a low-risk category, although many clinicians still appear to overestimate risk. A large number of practitioners would nevertheless resort to involuntary admission and contacting child welfare authorities to manage risk in these patients.

This survey supports our contention that greater awareness of OCD by staff and resident psychiatrists is needed. As well, a greater awareness of the low violence risk for this population is necessary to serve best the individuals with OCD-related aggressive and infanticidal/infanticidal obsessions.

References
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52. Booth et al.

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