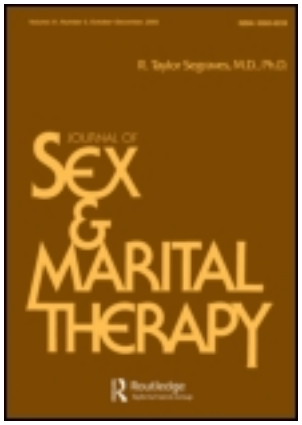

Journal of Sex & Marital Therapy
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/usmt20

Persistent Genital Arousal Disorder Misdiagnosed Because of Islamic Religious Bathing Rituals: A Report of Three Cases

Ejder Akgun Yildirim [a], Munevver Hacioglu [a], Altan Essizoglu [b] & Ilker Kucukparlak [a]

[a] Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, Istanbul, Turkey

[b] Diyarbakir State Hospital, Istanbul, Turkey

Accepted author version posted online: 17 Jan 2012. Version of record first published: 17 Aug 2012

To cite this article: Ejder Akgun Yildirim, Munevver Hacioglu, Altan Essizoglu & Ilker Kucukparlak (2012): Persistent Genital Arousal Disorder Misdiagnosed Because of Islamic Religious Bathing Rituals: A Report of Three Cases, Journal of Sex & Marital Therapy, 38:5, 436-444

To link to this article: http://dx.doi.org/10.1080/0092623X.2011.606888

Journal of Sex & Marital Therapy, 38:436–444, 2012

ISSN: 0092-623X print / 1521-0715 online
DOI: 10.1080/0092623X.2011.606888

Routledge
Taylor & Francis Group

Persistent Genital Arousal Disorder Misdiagnosed Because of Islamic Religious Bathing Rituals: A Report of Three Cases

EJDER AKGUN YILDIRIM and MUNEVVER HACIOGLU
Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, Istanbul, Turkey

ALTAN ESSIZOGLU
Diyarbakir State Hospital, Istanbul, Turkey

ILKER KUCUKPARLAK
Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, Istanbul, Turkey

Persistent genital arousal disorder is not well known or adequately understood by physicians. The disorder is characterized by a persistent and highly unwanted state of genital arousal and orgasm-like feelings. Ghusl *is an ablution in Islamic culture, which is an obligatory ritual wherein the body is washed thoroughly after exposure to religious contaminants such as sexual intercourse, menstruation, and childbirth. Muslim women suffering from the disorder may bathe frequently because of their religious beliefs. The authors summarize the case histories of 3 patients with persistent genital arousal disorder who were initially misdiagnosed with obsessive-compulsive disorder. All 3 patients presented with complaints of unwanted, persistent orgasms or orgasm-like arousals, and as a result, they performed ghusl several times a day. At previous interviews, the genital arousal was diagnosed as a sexual and somatic obsession, and repeatedly performing ghusl was considered a cleansing compulsion. Physicians' lack of awareness or knowledge of persistent genital arousal disorder, combined with the unwillingness of patients to discuss sexual problems, can lead to a focus on the repetitive bathing, and thus, a misdiagnosis of the problem as obsessive-compulsive disorder. These cases are presented to*

Address correspondence to Ejder Akgun Yildirim, Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, Bakirkoy Ruh Sagligi ve Sinir Hastaliklari Hastanesi, 34147, Istanbul, Turkey. E-mail: ejderyildirim@yahoo.com

highlight the possible pitfalls in the diagnosis of persistent genital arousal disorder cases in Islamic countries where ghusl is common.

Persistent genital arousal disorder (PGAD), also called *persistent sexual arousal syndrome*, was first described in 2001 (Leiblum & Nathan, 2001). The disorder is characterized by persistent genital arousal with or without orgasm (Goldmeier & Leiblum, 2006; Leiblum, Seehuus, Goldmeier, & Brown, 2007).

Although the etiology of PGAD is not clear, spontaneous arousal is considered a consequence of increased genital blood circulation (Thorne & Stuckey, 2008). Similar clinical conditions might be observed under antidepressant medication or withdrawal (Leiblum & Goldmeier, 2008). Epidemiologic data on PGAD is lacking; however, the condition is estimated to be more prevalent than reported (Basson et al., 2003). These cases are likely to be misdiagnosed because of the physicians' failure to recognize the disorder or because of the patients' inability to verbalize their sexual problems.

There are two types of ablution in Islam. The minor ablution (*wudu*) is performed by washing one's hands, feet, face, ears, mouth, and nose in a certain repetitive order. The major ablution (*ghusl*) must be performed as soon as possible after sexual intercourse, orgasm during sleep, or menstruation (Davis, 2004). The obligatory acts (*fard*) of *ghusl* involve rinsing of the inner mouth, nasal inhalation and exhalation of water, and washing of the entire body so that no part remains dry. Optional acts include washing the right arm before the left arm, and rinsing the feet last. certain prayers may also be performed. According to Islamic culture, sexual intercourse, involuntary vaginal lubrication or ejaculation, and menstruation cause spiritual contamination (Okasha, Saad, Khalil, el Dawla, & Yehia, 1994). This period of spiritual contamination, *janabat*, is considered impure, and Muslims must abstain even from praying and cooking until *ghusl* is performed (Newby, 2004). It is believed that people who die while in *janabat* will be barred from heaven; therefore, *janabat* can cause anxiety in Muslims. In Muslim communities, these beliefs and the ritualistic nature of the ablutions contribute to obsessive-compulsive disorder (OCD)–like symptoms such as long-term repetitive bathing. Okasha et al. (1994) reported that in Egypt, the most common compulsions were repeating, washing compulsions, and checking, and these were mostly related to religious beliefs. Okasha (2004) suggested that the ritualistic cleansing procedures can be a source of obsessions and compulsions about religious purity. He also pointed out that although it is socially acceptable for Egyptian men to have a wide range of sexual freedom, for Egyptian women, sexual freedom is still prohibited and remains a source of sin, impurity, and shame. The author concluded that women are surrounded by so many religious and sexual taboos, and this issue is a great source of worries, ruminations, and cleansing compulsions in women susceptible to developing OCD. Another Muslim community, Turkey, might have similar circumstances, where Karadag Oguzhanoglu, Ozdel, Ateşci, and

Amuk (2006) reported that OCD patients performed frequently because of religious obsession or obsessive doubt, and half of the patients who had sexual obsessions spent many hours in the bathroom for appropriate completion of *ghusl*.

In this report, we discuss three PGAD cases previously misdiagnosed as OCD because of repetitious performance of *ghusl*. Although these patients repetitively performed *ghusl* to end their spiritual contamination, such behavior was misevaluated as religious washing compulsions despite the patients' clear description of spontaneous genital arousal. We also look at problems associated with the correct diagnosis of PGAD, such as the patients' reluctance to discuss their sexual problems and physicians' failure to recognize the syndrome.

CASE 1

Ms. A. is a 50-year-old elementary school graduate, married with three children. She has been married for 31 years and has had marital problems since the beginning of her marriage, which involved several separations and reunions with her husband. She worked as a dishwasher for several years.

She complained of 10–14 spontaneous orgasms per day and a continual vaginal vibration. She would bathe after every orgasm. She had experienced these symptoms for 4 years. She stated that she would achieve orgasm during sexual intercourse but that would not relieve her sexual arousal.

In the psychiatry outpatient unit, her complaints were initially assessed as increased sexual desire, somatic obsession, and cleaning compulsion, and a pharmacotherapy regimen of quetiapine 50 mg/day and carbamazepine 200 mg/day was initiated for atypical mood disorder and OCD. The patient was diagnosed with OCD during the treatment process after the initial examination, and paroxetine 20 mg/day monotherapy was initiated. Because there was no relief from the sexual complaints despite the gradual increase of paroxetine and clomipramine to 60 mg/day and 150 mg/day, respectively, for 3 years, she was referred to our psychotherapy outpatient unit.

Assessment of her sexual history revealed that she had menarche at 12 years, masturbated for the first time at 17 years, and married at 18 years; she had never had premarital sexual intercourse. Even when not desiring sex, she had lubrication and orgasms during sexual intercourse. General psychiatric examination revealed a slightly depressive affect and depressive thought content.

CASE 2

Ms. B. is a 43-year-old elementary school graduate, married with two children, and unemployed. Before her complaint of spontaneous orgasms, she had a history of contamination obsessions and cleaning compulsions such

as hand washing. However, she was not treated because she was not functionally affected. Five years ago, she reported that she was experiencing insomnia and aggressiveness. She was diagnosed with adjustment disorder and treated with citalopram 20 mg/day and paroxetine 20 mg/day for about 1 year, after which the treatment was ceased because her symptoms subsided.

She stated that 2 years ago, the ceremony inducting her son into the military demoralized her deeply; she experienced her first spontaneous orgasm that evening. She complained that for the past 2 years, she had experienced continuous genital arousal, orgasm-like feelings at least 15 times a day, and had taken a ritual bath after each orgasm. She had a deep concern about committing sin and felt obligated to bathe repeatedly, even though she worried that bathing would increase her arousal. The main reasons for admission were persistent orgasms, bothersome genital arousal, and therefore, a need to perform *ghusl* ablution repetitiously.

After her gynecological admission for the sexual complaints, she was referred to the psychiatry outpatient unit. When she first complained of the genital arousal and consequent repetitive bathing at the initial assessment in the psychiatry outpatient unit, she was diagnosed with OCD, and treatment with citalopram 20 mg/day was initiated. The citalopram dose was raised gradually to 60 mg/day over 4 months; however, because the patient had no relief, the citalopram treatment was terminated and fluvoxamine 100 mg/day was initiated. The fluvoxamine dose was increased to 200 mg/day after 6 months, and she was referred to our psychotherapy outpatient unit. In our first assessment, we found that with fluvoxamine 200 mg/day, she had partial relief; she had only 3–4 spontaneous orgasms a day.

Her sexual history revealed menarche at 13 years and marriage at 18 years. She had never had premarital sexual intercourse and had no knowledge of masturbation. She had sexual desire, her arousal was sufficient, and she had orgasms during sexual intercourse. General psychiatric examination revealed a slightly depressive affect, mental preoccupation with her sexual problems, and subthreshold contamination obsessions and cleaning compulsions.

CASE 3

Ms. C. is a 61-year-old elementary school graduate, married for 41 years with 3 children, and unemployed.

Her complaints of orgasms while asleep and performing ablution twice a month had begun 4 years ago. Six months before her first medical admission, she became demoralized after her son left home and went abroad. After her son left, she experienced orgasm-like sensations constantly throughout the day, erotic dreams every night, and performed ablution at least twice a day. Four months before admission, she had fainted during an intense anxiety

attack as a result of an attempt to inhibit genital arousal. At her first admission, she was hospitalized in a neurology clinic of a university hospital, and video electroencephalography was performed and assessed as normal. After a psychiatric consultation, she was assessed as having conversive seizure, cleaning and repeating compulsions, and sertraline 50 mg/day was initiated.

During previous visits, she had not mentioned her sexual complaints, and informed the physicians only about her frequent bathing because of her concern of being misinterpreted as hypersexual, which she thought inappropriate at middle age. She was also concerned about her family observing her frequent bathing and the possibility of it being misinterpreted as frequent masturbation or hypersexuality, but she still felt obligated to have the ritualistic bath so as not to commit sin. She experienced orgasm-like sensations constantly throughout the day and performed ablution at least twice a day. She expressed concern that if she relaxed she would have an orgasm, and therefore, she was constantly trying to inhibit these feelings to avoid spiritual contamination.

She had menarche when she was 12 years old and got married at 18 years. She had no premarital sexual intercourse, and did not know how to masturbate. She desired sex, her arousal was sufficient, and she had orgasms during sexual intercourse. General psychiatric examination revealed a slightly depressive affect and a mental preoccupation with her sexual complaints.

Routine laboratory and hormone tests, video electroencephalography, and ultrasonography of the lower abdomen and pelvis were performed; the findings were in the normal physiological ranges for all 3 patients. At their final examination, the 3 patients were diagnosed with PGAD and adjustment disorder with depressed mood caused by PGAD using a Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), Clinical Version, Turkish Form (Corapcioglu, Aydemir, Yildiz, Esen, & Koroglu, 1999). Although Case 2 had subthreshold contamination obsessions and cleaning compulsions, these symptoms did not reach the clinical diagnostic level according to the SCID-I assessment. The other 2 patients had no obsessions or compulsions in the psychiatric evaluation that we conducted.

The 3 patients fulfilled all five criteria developed for PGAD: persistent involuntary genital and clitoral arousal, genital arousal unrelated to sexual desire, genital arousal not relieved by orgasm, unidentifiable cause for persistent arousal, and experiencing genital arousal as unwanted and intrusive (Basson et al., 2003; Leiblum, Brown, Wan, & Rawlinson, 2007).

DISCUSSION

Although all 3 patients experienced persistent arousal and orgasms, the fact that they performed bathing rituals as many as 10–15 times a day might have led the physicians to a misdiagnosis of OCD. Karadag et al. (2006) reported

that in Turkey, OCD patients perform *ghusl* frequently because of religious obsession or obsessive doubt, and half of the patients who have sexual obsessions spend many hours in the bathroom for appropriate completion of *ghusl*. Okasha et al. (1994) reported that the most common obsessions were contamination and religious obsessions and the most common compulsions were repeating and cleaning compulsions, which were mostly related to religious beliefs in their OCD survey of Egypt. Nazar, Mukhtar ul Haq, and Idrees (2011) reported religious washing compulsions in 44% of the patients in their OCD sample in Pakistan. Religious and sexual obsessions are more common in countries where a conservative religious practice is predominant. It has been reported that in Israel, 50% of obsessions are religious (Greenberg, 1984); in Iran, 62% and 41% of obsessions, respectively are religious and sexual in OCD patients (Ghassemzadeh et al., 2002). Studies from Turkey indicate that religious obsessions tend to decrease westward, where a more secular lifestyle has been adopted (Karadag et al., 2006). One study of eastern Turkey revealed that 39% of men and 8% of women with OCD had a compulsion to repeatedly perform ablution or pray (Tezcan, Ulkeroglu, Kuloglu, & Atmaca, 1997). Repeatedly performing *ghusl* is a common symptom in Turkish OCD patients. Furthermore, because all 3 patients were wearing traditional hijabs during the initial examination, the physicians might have assumed that the patients were religiously conservative and might have religious or sexual obsessions and compulsions when they complained of frequent bathing.

When the records of the initial visits were reviewed, 2 of the patients stated that they had persistent genital arousal and spontaneous orgasms, and therefore performed *ghusl* whenever they felt aroused. These complaints were considered somatic/sexual obsessions and ritualistic cleaning compulsions. Another misleading factor might be that the patients spent long periods of time in the bathroom; if they experienced genital arousal immediately after bathing, they felt they were spiritually contaminated again and had to restart the ablution. These complaints were similar to obsessive doubting, and the repetitive pattern might have enhanced the diagnosis of OCD. In addition, a lack of knowledge about PGAD by the physicians might have contributed to this misevaluation. Although the patients described the orgasm and genital arousal clearly, frequent bathing or spending excessive time in the bathroom posed social difficulties and functional impairments for the patients. Since performing repetitive ghusl also caused anxiety because of the fear of being perceived as sexually overactive, the complaints regarding religious bathing might have been most prominent for the patients during the initial examinations.

Although Patient 2 had subthreshold contamination obsession and cleaning compulsions beforethe sexual complaints, these symptoms were mild and she did not seek help. She visited the physician for her spontaneous orgasms. Although she clearly described her genital complaints during the clinical interview, this condition was interpreted as a somatic obsession.

Leiblum et al. (2007) reported increased obsessive-compulsive symptoms and other signs of anxiety such as panic attacks in PGAD since these patients monitored their bodily signs closely. It is known that there are cultural and religious differences regarding the manifestation of OCD. Intrusive thoughts and cleaning behaviors are more evident in Islamic culture (Yorulmaz, Gencoz, & Woody, 2009), which may lead physicians to consider the complaints of unwanted genital arousal and urge to perform ghusl as symptoms of OCD.

All 3 patients experienced intense distress over being *janabat* and were concerned about being perceived as hypersexual because of their repeated performance of ghusl. The 3 patients fulfilled the criteria for adjustment disorder with depressed mood but not for depressive disorder. Depressive symptoms such as feelings of guilt, distress, and increased anxiety have been reported in patients with PGAD. Comorbid depression in PGAD has also been reported at a rate of 55% (Leiblum et al., 2007). Medication with selective serotonin reuptake inhibitors at antiobsession doses might have altered depressive signs in these subjects.

PGAD has only recently been described in medical literature (Leiblum & Nathan 2001). It is known that most patients with PGAD are uncomfortable talking about this condition to physicians (Leiblum et al., 2007; Thorne & Stuckey, 2008), and most of the reported cases are from western countries. People's difficulty in talking about sexuality and the increased number of sexual myths within religious conservatives have been reported in traditional Islamic cultures (Dhami & Sheik, 2000; Yasan, Essizoglu, & Yildirim, 2009; Yasan & Gurgen, 2009). It is also known that sexual and religious obsessions correlate with late presentation of symptoms and with greater difficulty in expressing these complaints, especially in Muslim countries (Karadag et al., 2006; Okasha et al., 1994).

In conclusion, the three cases were presented to highlight the difficulty of arriving at a PGAD diagnosis. This is not unexpected given that PGAD is a relatively new and inadequately understood clinical entity. The ritualistic cleansing procedures associated with sexual activities in Islamic cultures might confound the clinical picture. The religious obligation to perform ghusl repeatedly is a well-known feature of OCD in Muslim communities; therefore, excessive ritualistic bathing could lead physicians to misdiagnose PGAD as OCD under these circumstances. When dealing with persistent, repetitive ablutions in Islamic cultures, physicians should consider PGAD as a differential diagnosis.

REFERENCES

Basson, R., Leiblum, S., Brotto, L., Derogatis, L., Fourcroy, J., Fugl-Meyer, K., ... Schultz, W. W. (2003). Definitions of women's sexual dysfunction reconsidered: advocating expansion and revision. *Journal of Psychosomatic Obstetrics and Gynecology*, *24*, 221–229.

Corapcioglu, A., Aydemir, O., Yildiz, M., Esen, A., & Koroglu, E. (1999). *DSM-IV Eksen I Bozukluklari (SCID-I) Icin Yapilandirilmis Klinik Gorusme, Klinik Versiyon* [Structured clinical interview for DSM-IV axis I disorders clinical version]. Ankara, Turkey: Hekimler Yayin Birligi.

Davis R. (2004). Glossary. In R. C. Martin, (Ed.), *The encyclopedia of Islam and the Muslim* World (2nd ed.). New York: MacMillan.

Dhami, S., & Sheikh, A. (2000). The Muslim family: Predicament and promise. *Western Journal of Medicine*, *173*, 352–356.

Ghassemzadeh, H., Mojtabai, R., Khamseh, A., Ebrahimkhani, N., Issazadegan, A. A., & Saif-Nobakht, Z. (2002). Symptoms of obsessive-compulsive disorder in a sample of Iranian patients. *International Journal of Social Psychiatry*, *48*(1), 20–28.

Goldmeier, D., & Leiblum, S. R. (2006). Persistent genital arousal in women: A new syndrome entity. *International Journal of STD and AIDS*, *7*, 215–216.

Greenberg, D. (1984). Are religious compulsions religious or compulsive: A phenomenological study. *American Journal of Psychotherapy*, *38*, 524–532.

Karadag, F., Oguzhanoglu, N. K., Ozdel, O., Ateşci, F. C., & Amuk, T. (2006). OCD symptoms in a sample of Turkish patients: A phenomenological picture. *Depression and Anxiety*, *23*, 145–152.

Leiblum, S., Brown, C., Goldmeier, D., & Seehus, M. (2007). Psychological, medical, and pharmacological correlates of persistent genital arousal disorder. *Journal of Sexual Medicine*, *4*, 1358–1366.

Leiblum, S., Brown, C., Wan, J., & Rawlinson, L. (2005). Persistent sexual arousal syndrome: A descriptive study. *Journal of Sexual Medicine*, *2*, 331–337.

Leiblum, S., & Goldmeier, D. (2008). Persistent genital arousal disorder in women: Case reports of association with anti-depressant usage and withdrawal. *Journal of Sex & Marital Therapy*, *34*, 150–159.

Leiblum, S., & Nathan, S. G. (2001). Persistent sexual arousal syndrome: A newly discovered pattern of female sexuality. *Journal of Sex & Marital Therapy*, *27*, 365–380.

Leiblum, S., Seehuus, M., Goldmeier, D., & Brown, C. (2009). Psychological, medical, and pharmacological correlates of persistent genital arousal disorder. *Journal of Sexual Medicine*, *4*, 1358–1366.

Nazar, Z., Mukhtar ul Haq, M., & Idrees, M. (2011). Frequency of religious themes in obsessive compulsive disorder. *Journal of Postgraduate Medical Institute*, *25*(1), 35–39.

Newby G. D. (2004). *A concise encyclopedia of Islam*. (2nd ed.). London, England: Oneworld Publications.

Okasha, A. (2004). OCD in Egyptian adolescents: The effect of culture and religion. *Psychiatric Times*, *21*, 124–127.

Okasha, A., Saad, A., Khalil, A. H., el Dawla, A. S., & Yehia, N. (1994). Phenomenology of obsessive-compulsive disorder: A transcultural study. *Comprehensive Psychiatry*, *35*, 191–197.

Tezcan, A. E., Ulkeroglu, F., Kuloglu, M., & Atmaca, M. (1997). Elazig bolgesindeki obsesif kompulsif bozukluklu hastalarda psikososyal ozellikler [Psychosocial characteristics of obsessive compulsive disorder patients residing in Elazig city]. *Dusunen Adam: Psikiyatri ve Norolojik Bilimler Dergisi*, *10*, 22–27.

Thorne, C., & Stuckey, B. (2008). Pelvic congestion syndrome presenting as persistent genital arousal: A case report. *Journal of Sexual Medicine*, *2*, 504–508.

Yasan, A., Essizoglu, A., & Yildirim, E. A. (2009). Predictor factors associated with premarital sexual behaviors among university students in an Islamic culture. *International Journal of Sexual Health*, *21*, 145–152.

Yasan, A., & Gurgen, F. (2009). Marital satisfaction, sexual problems, and the possible difficulties on sex therapy in traditional Islamic culture. *Journal of Sex & Marital Therapy*, *35*(1), 68–75.

Yorulmaz, O., Gencoz, T., & Woody, S. (2009). OCD cognitions and symptoms in different religious contexts. *Journal of Anxiety Disorders*, *23*, 401–406.