

EMETOPHOBIA: PRELIMINARY RESULTS OF AN INTERNET SURVEY

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Through electronic mail, we surveyed members of an internet support group for emetophobia (fear of vomiting). Respondents were 50 women and 6 men with a mean age of 31 years. Results suggest that, for this sample, emetophobia is a disorder of early onset and chronic course, with highly persistent and intrusive symptoms. Emetophobia is implicated in social, home-marital, and occupational impairment and it causes significant constriction of leisure activities. Nearly half of women avoided or delayed becoming pregnant. About three quarters of respondents have eating rituals or significantly limit the foods they eat. Respondents describe other problems such as depression, panic attacks, social anxiety, compulsions, and frequent history of childhood separation anxiety. Depression and Anxiety 14:149–152, 2001. © 2001 Wiley-Liss, Inc.

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INTRODUCTION

Emetophobia (fear of vomiting) has not been well characterized. Marks [1987] emphasized concern over possible humiliation, suggesting that emetophobia should be classified as a social phobia. DSM-IV [APA, 1994] lists phobic avoidance of situations that may lead to vomiting as an example of specific phobia, other type. Lydiard and colleagues [1986] present a case of sudden onset of nausea and fear of vomiting as an example of panic disorder. Pollard and colleagues [1996] propose that the extensive avoidance caused by fear of vomiting should be categorized as agoraphobia without panic. In children, authors have noted the clinical overlap of this syndrome with separation anxiety disorder [Klonoff et al., 1984].

Lelliot et al. [1991] compared a mixed group (n=71) of patients with fears of vomiting or incontinence (fecal or urinary) with two other patient groups: one with agoraphobia (with classic panic attacks) and one with social phobia. The vomiting/incontinence group was mostly female, had earliest onset, and was less anxious and depressed compared with the agoraphobia group. Himle and Crystal [1991] included a small combined group with vomiting or choking phobias (n=9) in comparisons of modes of onset across phobia subtypes. They found that onset of phobia in this combined group frequently followed a direct experience with vomiting or choking. It is difficult to draw conclusions from these mixed samples. A homogenous sample of individuals with emetophobia has yet to be studied systematically.

The internet has become a valuable resource for conducting research into psychiatric disorders [Jerome et al., 2000; Stones and Perry, 1997]. The coordinator

of a List Server mailgroup for individuals with emetophobia contacted one of the us (DFK) with the hope of learning more about emetophobia. In response, we attempted to gather preliminary information about this sample through a survey, distributed and returned anonymously via electronic mail.

METHOD

Based on responses to a series of open-ended questions, we composed a survey of 29 items (survey available from authors). We forwarded the survey to the organizer of the List Server mailgroup for emetophobia, who distributed it via email. From about 100 active members, the host received 56 completed surveys, which she then forwarded to us with no email addresses or other identifying information. Subgroups were contrasted using conventional *t*-tests for parametric variables and chi square tests for nominal variables. Probability values were computed based on uncorrected two-sided tests with thresholds set at $P=.05$ for significance and $P=.10$ for noting statistical trends.

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RESULTS

PARTICIPANT CHARACTERISTICS

Respondents ($n=56$) were 89% female. They ranged in age from 14 to 59 years (mean=31.4; SD=9.7). Two were under 18. About half (46%) of the respondents were college graduates. All had graduated from high school or obtained a GED, except for two who were still in high school. Thirty-four (61%) were working outside of the home, ten (18%) were homemakers, seven (12%) were unemployed or on disability, four (7%) were full time students, and one was retired. Thirty-one respondents (55%) were married or engaged, eighteen (32%) were single, and seven (12%) were divorced or separated. We could not determine country of residence, but use of language and descriptions of context indicate that some did not reside in the US.

CLINICAL FEATURES

Duration and persistence. Respondents portrayed emetophobia symptoms as early in onset, chronic in course, and high in persistence. Mean age of onset was 9.2 years (SD=5.0; range = 4–32 years of age). Mean duration at the time of the survey was 22 years (range = 2–54 years of age; SD=11.4). Twenty-nine respondents (52%) denied having even brief periods of remission of symptoms. Twenty (36%) had partial or brief remissions. Only seven (12%) described periods of full remissions of emetophobia symptoms lasting 6 months or longer.

Over 90% of respondents said they experienced distress from emetophobia symptoms 52 weeks a year. Over 70% said they were distressed 6 to 7 days a week. Some reported that distress lasted only a few minutes at a time, while for others distress was constant (e.g., “nearly every waking moment”). Eighteen (32%) said they felt distress during most of their waking hours.

Self vs. others vomiting. Nearly two thirds of respondents ($n=35$) were more fearful of vomiting themselves than of seeing others vomit. Eighteen percent ($n=10$) said they were more fearful of seeing others vomit. Twenty percent ($n=11$) said they were equally fearful of both scenarios.

Triggers. Almost all respondents said that feelings of fear were triggered by both external stimuli (e.g., sight of food) and internal sensations (e.g., acid stomach). Mean percentage of time fear was triggered by external stimuli was highest (45.2%; SD=26.7), followed closely by internal sensations (40.5%; SD=26.3), with fear coming “out of the blue” seen as less common (15%; SD=19.5).

Public vs. private. Nearly two thirds of respondents (62%) said they were more worried about vomiting in a public place. About a third (34%) said they were equally anxious about vomiting in a public or private place. Only two respondents (4%) said they were more anxious about vomiting in a private place.

Many respondents who were more fearful of vomiting in public also volunteered that they were fearful of vomiting in private. Respondents who feared vomiting in public were more likely to respond that they had problems with social anxiety (29% vs. 5%, $\chi^2=4.71$, $P=.04$).

Panic attacks. Half the respondents ($n=28$) answered yes to the question of whether they experienced panic attacks that had “no relationship to (ongoing) fear of vomiting.” The most frequently mentioned panic symptoms were nausea (82%), shortness of breath (62%), and gastric distress (57%).

Comorbidity. Respondents described other mental health problems they experienced in present or past. Since no clinical assessment was conducted, these reports reflect participants’ own understanding of their difficulties, which may or may not be based on diagnoses given by clinicians. Thirty percent said they were fearful of other specific things (e.g., insects) to which they react with disgust. Forty percent said they had “panic disorder” or “agoraphobia;” 46% said they had “depression;” 21% reported problems with social anxiety, and 18% said they had “obsessive compulsive disorder” (OCD). Fifty-seven percent ($n=32$) described past symptoms of childhood separation anxiety disorder (CSAD). With the exception of CSAD symptoms, emetophobia typically preceded these other problems

Treatment response. Nineteen (34%) respondents felt they had partial benefit from medications. Nine (16%) benefited from psychotropic medications, which included benzodiazepines and antidepressants. Others said they benefited from gastrointestinal medicines (e.g., Phenergan and Zantac). Many said they avoided trying medications for fear that these would make them nauseous. Six respondents (11%) said they had partial benefit from psychotherapy. A few patients described having behavior therapy or hypnosis for emetophobia with no benefit. A few individuals in psychotherapy for other reasons said they were too ashamed or anxious to discuss emetophobia with their therapists. In general, respondents seemed skeptical about the usefulness of psychotherapy. Only six said they would be willing to try an exposure therapy that included exposure to vomiting sensations. Thirty (54%) said they would definitely not try this and twenty (36%) were unsure or said they would consider it if it was guaranteed to work.

Impairment. Thirty-five respondents (62%) gave examples of social impairment (e.g., avoiding parties where there might be alcohol). Nineteen (34%) gave examples of impairment in home-marital functioning (e.g., difficulty being left alone with young children). Eleven (19.6%) gave examples of impairment in occupational functioning (e.g., having to leave work frequently for fear of vomiting). Five (9%) described impairment in school (e.g., skipping class). Seventy percent ($n=39$) described significant constriction in leisure activities. The most commonly avoided activities involved modes of travel (e.g., buses, airplanes, and car

trips) or venturing to new unfamiliar places. Twenty-two female respondents (44%) said they had avoided or delayed becoming pregnant because of fear of vomiting; 12 others (24%) said they feared pregnancy for this reason but this had not affected their plans. Six other women (12%) said that emetophobia had made their pregnancies especially distressing.

Three quarters of the respondents ($n=42$) said they had rituals around eating (e.g., excessive washing or repeated checking for freshness) or had significantly limited the way they eat or the type of foods they eat. Many volunteered that they do not eat outside of the home or eat only from a list of "safe foods." A few respondents expressed concerns about having poor nutrition and being underweight because they were too worried about what they eat. Twenty-four respondents (43%) said they avoided using the word vomit for fear that this would trigger images or sensations of vomiting. In correspondence in this support group, individuals typically use the letter "v" to refer to vomiting.

ETIOLOGIC FACTORS

Conditioning experiences. Sixteen respondents (29%) recalled having severe or vivid bouts of vomiting, although in four of these cases fear of vomiting reportedly preceded the vomiting experience. Thirty-three respondents (59%) recalled vivid experiences in which they witnessed others' vomiting. In some cases these were repeated exposures to relatives, including parents, who were ill, pregnant, or alcoholic. Eleven respondents (20%) had distressing experiences both of vomiting on their own and of observing others.

Medical history. Eleven respondents (20%) had been hospitalized overnight in childhood. Seven of those (above) who recalled vomiting experiences had also been hospitalized and vomited from illness or in response to medical procedures (e.g., anesthesia). Others were hospitalized for common childhood problems (tonsillectomy and broken leg) with no clear connection to vomiting. About 30% of respondents said they had experienced a serious medical problem in adulthood, the most common which were endocrine disorders ($n=4$), gastrointestinal disorders ($n=3$), and asthma ($n=3$).

Family history. Excluding two respondents who were adopted, 57% ($n=31$) said at least one first-degree relative had been diagnosed with a psychiatric disorder. The most common disorders reported in relatives were panic disorder ($n=11$), depression ($n=9$), and OCD ($n=5$). Four respondents (7%) said that first degree relatives had emetophobia.

PARTICIPANTS WITH AND WITHOUT PANIC ATTACKS.

In an effort to clarify the relationship of this syndrome with panic disorder, we compared respondents who reported having panic attacks unrelated to emetophobia with those who denied unrelated attacks. No differences were found in participant characteristics or

in most clinical features. Respondents with unrelated attacks were more likely to say they avoided or had problems with pregnancy (96% vs. 62%; $\chi^2=8.8$; $P<.005$) and to report problems with depression (61% vs. 32%; $\chi^2=4.6$; $P=.03$). There was a trend for those with spontaneous panic attacks to less frequently report direct vivid vomiting experiences that preceded emetophobia (7% vs. 25%; $\chi^2=3.3$; $P=.07$).

DISCUSSION

Results of this survey suggest that for some individuals emetophobia is a chronic, pervasive, and debilitating disorder. Emetophobia may cause daily distress, effect social, home, and marital functioning, and lead to avoidance of pregnancy. Severity of anxiety and impairment in our sample seems to be more severe than in the combined sample (with emetophobia and incontinence concerns) of Lelliot and colleagues [1991]. However, since current findings are based on an anonymous survey in a convenience sample, we hesitate to draw conclusions. Our main goal was to efficiently gather data that could inform future studies.

Unfortunately, little is known about the prevalence of emetophobia. Case reports [e.g., Phillips, 1985] are rare. An unpublished report [Kirkpatrick and Berg, 1981] found fear of vomiting to be at the "extreme or terror" level in 3% of men and 6% of women in a non-psychiatric sample. However, it is not clear how many of those people might have significant distress or impairment from their fear.

The early age of onset and chronic course of emetophobia are consistent with the DSM-IV categorization of specific phobia. Although many specific phobias are more clearly focused on external stimuli, internal focus of fear (e.g., fear of panic attacks) is common in some situational and blood injury phobias. In descriptions of fear, most respondents emphasized the discomfort of vomiting rather than fear of embarrassment and many were as anxious about vomiting in private. Thus humiliation seemed to be a frequent, but secondary, concern as is often the case in panic disorder. These preliminary data do not support the categorization of emetophobia as social phobia by Marks [1987], although a thorough diagnostic study is needed to clarify the role of social anxiety.

Persistence of fear in absence of clear external triggers, along with avoidance of numerous situations (e.g., travel) loosely related to the feared event, suggest a clinical picture more consistent with agoraphobia. A difference is that avoidance in agoraphobia relates to fear of incapacitation should, e.g., a panic attack occur. In the current sample fear is of the occurrence of a noxious event. Individuals avoid numerous situations for fear that they might encounter a trigger for nausea or vomiting. Interestingly, more than a third of respondents say they fear seeing others vomit as much as vomiting themselves. No such fear has been reported among agoraphobic patients with panic attacks.

Although half of respondents said they had sudden onset panic attacks, we could not confirm that these were full symptom panic attacks nor could we determine their relationship to emetophobia. Reported difficulties with "panic disorder" or "agoraphobia" may be independent of emetophobia symptoms or may have been (mis) diagnosed based solely on emetophobic avoidance. The relationship between panic attacks and emetophobia would also be better studied using a thorough diagnostic assessment with special attention to sequence of symptoms and focus of fear.

Responses also highlight the compulsive quality of some behaviors related to emetophobia. Many respondents say they wash their food excessively, and smell for freshness and check freshness labels repeatedly. Others have bedtime rituals (e.g., eating a certain number of crackers), which, they feel, will keep them from feeling nauseous. Many avoid using the word vomit (and replace it with "v"). Many respondents report difficulties with OCD (18%), although this is not a systematic diagnosis. Interestingly, Jenike and colleagues [1987] describe bowel preoccupations as fitting within the obsessive compulsive disorder spectrum. In a diagnostic study, one could ask about presence of OCD symptoms as distinct from emetophobia concerns.

In a case series report, Klonoff et al. [1984] observed that onset of emetophobia usually followed a stomach virus or medical procedure (e.g., surgery), which led to vomiting. In the current sample, about two thirds of respondents recalled vivid experiences either of vomiting themselves or of witnessing others vomit. Because we did not also survey a control group without emetophobia, it is difficult to interpret this rate [Dinardo et al., 1988]. Recollections of vomiting experiences may also be influenced by retrospective bias.

A few case reports describe successful psychotherapy treatment of emetophobia in adults and children using contingency management [Klonoff et al., 1984], graduated exposure [McFayden and Wyness, 1983; Phillips, 1984], and flooding [Wijesinghe, 1974]. Although few respondents in the current study found psychotherapy to be helpful, this may be due to selection bias (i.e., it is unlikely that an individual who was successfully treated would choose to join an emetophobia support group). This sample is noteworthy for treatment avoidance. It is striking that many respondents would not bring up emetophobia to their therapist and most said they would not try an exposure-based treatment. Others avoided trying, e.g., anxiolytic medications for fear these might cause nausea.

Although our survey failed to cover some important topics such as somatization concerns, we were impressed that extensive information could be gathered through the internet at no cost and with great effi-

ciency. Further research is needed to determine the reliability of information obtained anonymously through the internet [Childress and Asamen, 1998]. From a clinical standpoint, this support group appeared to play an important role for many of its members. For those with an unusual disorder or a disorder that is rarely talked about, the anonymity and geographical breadth of the internet may present the only opportunity to share information and support with others who have the same problem.

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