

Rhinotillexomania: Psychiatric Disorder or Habit?

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Background: Conditions once considered bad habits are now recognized as psychiatric disorders (trichotillomania, onychophagia). We hypothesized that nose picking is another such "habit," a common benign practice in most adults but a time-consuming, socially compromising, or physically harmful condition (rhinotillexomania) in some.

Method: We developed the Rhinotillexomania Questionnaire, mailed it to 1000 randomly selected adult residents of Dane County, Wisconsin, and requested anonymous responses. The returned questionnaires were analyzed according to age, sex, marital status, living arrangement, and educational level. Nose picking was characterized according to time involved, level of distress, location, attitudes toward self and others regarding the practice, technique, methods of disposal, reasons, complications, and associated habits and psychiatric disorders.

Results: Two hundred fifty-four subjects responded. Ninety-one percent were current nose pickers although only 75% felt "almost everyone does it"; 1.2% picked at least every hour. For 2 subjects (0.8%), nose picking caused moderate to marked interferences with daily functioning. Two subjects spent between 15 and 30 minutes and 1 over 2 hours a day picking their nose. For 2 others, perforation of the nasal septum was a complication. Associated "habits" included picking cuticles (25%), picking at skin (20%), biting fingernails (18%), and pulling out hair (6%).

Conclusion: This first population survey of nose picking suggests that it is an almost universal practice in adults but one that should not be considered pathologic for most. For some, however, the condition may meet criteria for a disorder—rhinotillexomania.

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In recent years, psychiatry has seen the gradual emergence of "secret" disorders, previously thought to be rare or trivial and not deserving of attention. The underrecognition of obsessive-compulsive disorder (OCD) (0.05% prevalence according to older psychiatric literature) was attributed to embarrassment, stigma, and a sense of isolation that kept sufferers from seeking professional help. The Epidemiologic Catchment Area (ECA) study found a lifetime prevalence that was over 40 times greater (about 2.5%) and established OCD as a common psychiatric disorder.¹ This, in turn, led to improved diagnosis, widespread public and professional education, and the development of effective pharmacotherapy and behavior therapy.

In a similar fashion, trichotillomania has emerged from hiding. It, too, was thought to be a rare condition, but recent surveys have found that it may affect upwards of 1% to 1.5% of the population.² Greater recognition of this disorder led to it being classified in DSM-III-R and DSM-IV as a separate entity in the "Impulse Control Disorders Not Elsewhere Classified" section. Professional and public interest has evolved accordingly, leading to more extensive research, education, and treatment programs.

Psychiatric attention has recently focused on nail biting (onychophagia), recognizing that what is usually a common, trivial habit can, for some, be a severe pathologic condition. Problems associated with severe onychophagia include infections, nail bed damage and scarring, craniomandibular dysfunction, and dental disease.^{3,4} Unlike nose picking, nail biting has been extensively studied with regard to epidemiology and treatment.⁵ A selective yet modest response to clomipramine over desipramine was noted, suggesting a possible relationship between onychophagia and obsessive-compulsive disorder.⁴

Could severe nose picking be another one of these hidden disorders that affects a substantial number of persons who keep their condition a secret because of embarrassment and social taboo? A review of the medical literature revealed a paucity of information about nose picking. It is sometimes alluded to as a cause of epistaxis in children, but it is usually not directly discussed. "The most common cause of nose-

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bleed in children is dryness and crusting...."^{6(p218)} On the other hand, the transmission of viral infections via a nasal-digital-nasal route is well established.⁷ In the chapter "Habitual Manipulations of the Body," Kanner devotes only five lines to nose picking but does state that "in many instances it is done for many years, by some children so violently that nosebleeds are the result."^{8(p539)} A case report described a 36-year-old chronic nose picker with "life threatening self-mutilation of the nose" associated with a hematocrit of 18.5%.^{9(p676)} The authors speculated that the nose was chosen for self-mutilation because it "might be a symbolic self-castration."^{9(p677)} Like the penis, it is a protruding, unpaired, midline organ.

A 61-year-old woman needed a nasal prosthesis because she "literally picked away her entire nose including the nasal septum, much of the turbinate bone, the internal nasal structures, and most of the hard palate."^{10(p593)} Psychiatrists characterized her "as psychotic because of her present behavior patterns, the amount of self-destruction, and the obsessive-compulsive reaction with signs of depression."^{10(p594)}

The psychoanalytic literature adds support to the secretive nature of nose picking. "It is quite typical for a patient to be in his third year of analysis before he will admit to picking his nose and generally, but not always, eating the pickings. The nose-pickings are reported to be quite tasty, salty, to be exact. The patient suffers no guilt, but he is ashamed to tell you about it. We can safely make the assumption that every obsessional neurotic is a nose-picker and/or anus picker and will take several years to communicate that information."^{11(pp685-686)}

Christenson and Mitchell compared bulimics (N = 65) and controls (N = 40) with regard to a number of habits including nose picking. Six percent of the bulimics and 12.5% of the controls acknowledged that they picked their nose. No further details were provided.¹² Joubert recently reported on the incidence of "oral-based habits" in 310 university psychology students who completed a questionnaire. Nose picking was acknowledged by 49.1% of men and 21.3% of women although no further information was available.¹³

To our knowledge, a nose picking survey of the general population has not previously been done. Despite the emotionality associated with the subject, little is actually known about the practice. Our assumption was that for most people, it is a benign and private habit. Our concern was that a small, but nonetheless substantial, number of individuals have a more severe form of the condition—one that may consume excessive amounts of time and/or cause subjective suffering, interpersonal and social problems, and physical discomfort or damage. Our hypothesis is that rhinotillexomania (*rhino* = nose, *tillexis* = habit of

picking at something, *mania* = obsessive preoccupation with something) is a relatively common yet underrecognized and almost never treated disorder.

METHOD

The authors constructed the "Rhinotillexomania Questionnaire" and refined it on advice from colleagues. The questionnaire was mailed to 1000 residents of Dane County, Wisconsin, selected randomly from residential listing according to zip code. A cover letter stated, "The University of Wisconsin is conducting a survey of a common but unstudied habit scientifically known as 'rhinotillexomania.' Its common name is nose-picking." Recipients were assured of anonymity and encouraged to be serious about their responses. Nose picking was defined as "Insertion of a finger (or other object) into the nose with the intention of removing dried nasal secretions." The study was approved by the University of Wisconsin Center for Health Sciences Human Subjects Committee. A copy of the questionnaire is available from the authors upon request.

RESULTS

Questionnaires were completed and returned by 254 recipients (25.4%). The return rate, while not robust, was considered more than adequate for an unsolicited questionnaire survey (Table 1).

Only 8.7% of the respondents reported that they never picked their nose. Ninety-one percent acknowledged that they had picked in the past and were currently still picking (only 3 mentioned stopping [at ages 7, 10, and 54 years]). Most respondents rated their picking as average or less (86.5%); but 9.2% answered "more than average"; 0.8% (N = 2), "very much more"; and 0.4% (N = 1), "extreme." With regard to frequency, 47% reported picking less than daily; 25.6%, daily; 22.3%, between 2 to 5 times daily; while 3 individuals acknowledged picking at least hourly. When queried about average time spent daily with nose picking, 55.5% responded 1 to 5 minutes; 23.5%, 5 to 15 minutes; 0.8% (N = 2) for 15 to 30 minutes; and 0.4% (N = 1) for over 2 hours.

The amount of personal distress caused by nose picking was "mild to none" in all respondents, but 4.6% (N = 11 of 239) felt that their nose picking was "very disturbing" to others. When asked how nose picking interfered with daily functioning, most (90.8%) responded "not at all." One individual, however, noted "moderate" and 1 "marked" interference. Responses with regard to "complications of nose picking" included nosebleeds (18.0%), social embarrassment (12.2%), infections (1.3%), and perforation of the nasal septum (0.8%, N = 2).

Table 1. Demographic Data

Age (y)
Range = 21-84 , mean = 50.3, median = 46
Sex
Men = 62.2%
Women = 33.5%
No response = 4.3%
Race
White = 72.8%
Native American = 22.4%*
Other and incomplete = 4.8%
Marital status
Married = 66.9%
Divorced = 14.2%
Single = 10.2%
Remarried = 4.3%
Other = 4.3%
Education
High school graduate = 10.2%
Technical school graduate = 10.6%
College graduate = 20.1%
Advanced degree = 21.7%
Other = 37.4%
Employment status
Employed = 73.6%
Retired = 21.7%
Unemployed = 2.8%
Student = 1.6%

*Since the population of Dane County is predominantly white, it is assumed that most of the "Native American" responses refer to being born in the United States rather than being American Indian.

Public/Private Nose Picking

Forty-three percent acknowledged some public picking, but only 4.2% made no effort to avoid being seen. The most common public settings were automobiles and office.

Tolerance of public nose picking was related to age of the picker with two thirds of the respondents not being disturbed by a child under the age of 6 but well over two thirds being upset by teenagers, adults, and the elderly picking in public.

Public pickers were felt to be socially unskilled by 59.2% of respondents, while only 3.8% held this opinion about private pickers. Nose picking in public was considered a sign of mental illness by only 1.7% of respondents.

Opinions of Nose Picking

Nose picking in private was felt to be an acceptable practice by 66.4%, but only 8.8% felt it was acceptable under any circumstance. In contrast to the 91.3% who acknowledged being active nose pickers, only 49.2% felt that it was "common among adults," and only 75.2% felt it was "something that almost everyone does."

Reasons for Nose Picking

The majority of respondents (82.8%) picked "to unclog the nasal passages." Other reasons given were to relieve discomfort or itchiness (66.4%), to avoid

Table 2. Frequency of Associated Habits and Disorders

Habit/Disorder	%	%
Fingernail biting	54.6 never	18.5 current
Cuticle picking	61.3 never	25.2 current
Pulling out hair	81.1 never	6.3 current
Picking at skin	64.3 never	20.2 current
Ever diagnosed as having a psychiatric disorder	92.4 no	4.6 yes

unsightly appearance (35.7%), personal hygiene (34.0%), and habit (17.2%). Five individuals (2.1%) answered "enjoyment" and 1 (0.4%) stated "sexual stimulation." (Multiple responses were possible.) Associated habits and disorders were also tabulated (Table 2).

Miscellaneous

Most pickers use their index finger (65.1%) while fifth finger (20.2%) and thumb (16.4%) were next most common. Some pickers (11.8%) used something other than their fingers (e.g., pencil eraser, pencil tip, paper clip, tweezers). Once removed, the nasal debris was examined, at least some of the time, by most respondents. It was usually disposed of in a tissue or handkerchief (90.3%), but 28.6% used the floor, 7.6% the furniture, and 8.0% ate it.

Sex Differences

Men were more likely to consider public nose picking to be normal (39.2% vs. 23.5%) and to pick their nose at least daily (55.3% vs. 39.0%). At least 80% of both groups felt that private nose picking was normal.

DISCUSSION

Unsolicited questionnaire surveys suffer from a relatively low rate of return that increases the likelihood that respondents do not represent the general population. While the anonymity of this survey may have ensured a higher rate of return (25.4%), it made it impossible to clarify or confirm data by direct interview. Since recipients of the survey were selected from residential listings, it is likely that more men received it. This may account for the 2:1 male response. Since women respondents were more likely to disapprove of nose picking, it is also possible that more women disapproved of the survey and did not return the questionnaire.

The survey suggests that nose picking is almost universal (> 90%) in the adult population, although individuals do not realize how common the practice is (only 49.2% felt it was common among adults and 75.2% that it was "something almost everyone does"). For most, nose picking is a benign and usually private

practice that in no way could qualify as a psychiatric disorder. For a minority, however, the consequences of the practice are substantial, suggesting that rhinotillexomania, the disorder, does exist (which in DSM-IV would be classified as an impulse control disorder not otherwise specified). While none acknowledged that the practice caused anything other than mild personal distress, 4.6% felt their picking was very disturbing to others. With regard to time consumption, 3 respondents picked for at least 15 minutes daily (1 for over 2 hours). It is unclear whether these durations would qualify as a disorder in a fashion similar to the "more than an hour a day" criterion for obsessive-compulsive disorder (DSM-IV). Other indicators that rhinotillexomania is a disorder include the 2 respondents in whom nose picking interfered considerably with daily function and 2 others (0.8%) who perforated their nasal septum. If 0.8% of the adult population of the United States have picked through their nasal septum, over one million people would be involved.

Unsolicited letters received in response to media publicity also suggest that we have uncovered the "tip of the iceberg." Some examples:

He has his bathroom ritual, he puts up "Q-tips" cleaning his nose, pulling down any mucous, blood, whatever, he has a little special flashlight, he looks up inside, now this can take over a half hour or longer.

I, too, was a compulsive nose-picker at almost every opportunity of privacy, I've picked my nose sometimes to the point of drawing blood. The nose always seemed to get plugged or at least that was the sensation. Over the years the septum began to thin, eventually a hole appeared until finally there was no septum at all. It started to become a grave problem. A number of doctors saw the hole in the septum but did not comment.

My immediate reaction was it's about time. For the last nine years, every waking moment of every day, whenever possible! I felt so badly about myself at times I don't want to be around people....I had surgery to remove scar tissue. I was

so desperate...believe me we all try to conceal this nasty habit and in most cases I assume people would never see a physician about it, in case they got laughed out of the office.

Our population survey was not intended to be the pivotal study of rhinotillexomania; rather, its purpose was to open a crack in a door that had been previously closed and locked. The survey response and the unsolicited comments generated by survey publicity suggest further study of rhinotillexomania should be pursued.

Drug names: clomipramine (Anafranil), desipramine (Norpramin and others).

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