

Prevalence and Motivation: Pubic Hair Grooming Among Men in the United States

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Abstract

Pubic hair grooming is a growing phenomenon and is associated with body image and sexual activity. A nationally representative survey of noninstitutionalized adults aged 18 to 65 years residing in the United States was conducted. Differences in demographic and sexual characteristics between groomers and nongroomers were explored. Four thousand one hundred and ninety-eight men completed the survey. Of these men, 2,120 (50.5%) reported regular pubic hair grooming. The prevalence of grooming decreases with age, odds ratio = 0.95 (95% confidence interval [0.94, 0.96]), $p < .001$. Adjusting for sexual frequency and sexual orientation, grooming is associated with performing and receiving oral sex. The majority of men report grooming in preparation for sexual activity with a peak prevalence of 73% among men aged 25 to 34 years, followed by hygiene (61%) and routine care (44%). The majority of men who remove their pubic hair groom the hair above the penis (87%), followed by the scrotum (66%) and the penile shaft (57%). Overall, pubic hair grooming is common among men aged 18 to 65 years in the United States. Younger ages are associated with greater rates of pubic hair grooming. Many men groom for sex, in particular oral sex, as well as for routine care and hygiene.

Keywords

pubic hair, grooming, oral sex, hairiness, prevalence

Introduction

Pubic hair grooming is increasingly prevalent among men and women in the United States (Gaither et al., 2015; Herbenick, Schick, Reece, Sanders, & Fortenberry, 2010). There are numerous reasons to remove pubic hair; the most commonly reported are focused on sexual activity and sexual expression (Ramsey, Sweeney, Fraser, & Oades, 2009). Increasing access to sexually explicit material may also influence grooming motivation and trends (Vannier, Currie, & O'Sullivan, 2014). In a recent study, pubic hair grooming was strongly associated with sexual activity and practices (Gaither et al., 2015). Pubic hair grooming may lead to higher genital satisfaction and sexual function in women (Herbenick et al., 2010) and to greater positive body image in men (Martins, Tiggemann, & Churchett, 2008). Interestingly, pubic hair-related grooming injuries have increased over the past 10 years, and it has been suggested that anogenital grooming may put one at risk for a sexually transmitted infection (STI;

Gaither et al., 2015; Glass et al., 2012). The association between pubic hair grooming, sexual activity, and genital injuries/infections indicate that this is a potentially important but overlooked public health issue.

Baseline prevalence and characteristics of pubic hair grooming in women has been well studied. Among women, grooming is associated with younger ages, cunnilingus, and grooming-related genital injuries (DeMaria, Flores, Hirth, & Berenson, 2014; Herbenick et al., 2010; Herbenick et al., 2013). Very few studies have looked at baseline prevalence and characteristics of pubic hair grooming in

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men. A study of college students estimated the prevalence of below the neck grooming among men to be 63.6% (Boroughs, Cafri, & Thompson, 2005). The prevalence among men outside of college has not been studied. Given that grooming is associated with injuries and potentially STI, a more expansive study of pubic hair grooming in men is warranted.

Aims

The primary aim of the current study is to assess the prevalence and characteristics of pubic hair grooming in a national sample of U.S. men. The authors seek to understand the most common areas and methods men use for grooming, what demographic characteristics are associated with pubic hair grooming, and how pubic hair grooming is related to sexual activity. The authors hypothesize that grooming is more frequent in younger and more sexually active men. The intent of the current study is to provide information on common grooming practices to better inform clinicians who may be called to address issues of genital grooming in men.

Method

Study Population

A nationally representative survey of noninstitutionalized adults aged 18 to 65 years residing in the United States was conducted. A questionnaire examining the prevalence of injuries and infections that occur as a result of personal grooming and associated risk factors was developed. The survey was conducted with the GfK Group (GfK, formerly Knowledge Networks). Details regarding GfK study methods have been reported previously ("Knowledge Panel Design Summary," 2013). The panel members are recruited using address-based sampling and random probability-based sampling to be representative of the population of the United States (Chang & Krosnick, 2009).

GfK samples addresses from the U.S. Postal Service's Delivery Sequence File. Address-based sampling estimates 97% of households can be reached and contacted through household mail (Chang & Krosnick, 2009). Once the panel members are recruited, they receive notification via e-mail to participate in a study sample. Panel members may also check their personal online member page to participate in survey taking. The topic of the survey is given to participants. Participants do not see any questions from a particular survey until they accept the survey. The topic of the current study given to participants was "Personal Grooming Injuries." GfK provides a laptop or netbook computer and free Internet service to all panel members without access to the Internet. For the current study, panel members received 1,000 points for completing the survey, which is the cash equivalent of \$1.

In addition to standard measures taken by GfK to enhance survey cooperation, e-mail reminders were sent to nonresponders on Day 3 of the field period. Although the survey as a whole has not been validated elsewhere, a pretest survey was completed in December of 2013 to ensure participants understood the questions. The final survey was conducted in January of 2013 in which 7,580 subjects (men and women) completed the survey out of 14,409 sampled (completion rate of 52.5%). GfK consented all participants prior to the beginning of the survey.

GfK uses statistical weighting adjustments to correct for known deviations. Additional survey errors such as noncoverage and nonresponse are also corrected for using panel demographic poststratification weights. The Committee on Human Research at the first author's institution approved the study.

Predictor Variables

The survey instrument can be found in the appendix. The following demographic data were collected: age, race, relationship status, education, and geographic region. Baseline hairiness and genital satisfaction were collected using previously validated questionnaires (Davis, Paterson, & Binik, 2012; Ramsey et al., 2009) that use a 1 to 7 Likert-type scale. Sexual practice characteristics including sexual partner sex, sex frequency, number of sexual partners, and specific sexual behaviors was assessed.

Outcome Variables

Differences in characteristics between male groomers and nongroomers was explored. Groomers were defined as those respondents who reported regular grooming (daily, weekly, monthly, or yearly). Nongroomers were defined as those who never groomed their pubic hair or those who have groomed but did not report regular grooming (Question 5A in the appendix). The frequency, location, and method of removal were analyzed. Questions about personal grooming habits were asked including grooming frequency and intensity, such as how often the participant groomed all of his pubic hair. Instrument for pubic hair removal (e.g., razor, electrolysis, etc.), motivations for grooming (sex, trip to the doctor, etc.), and grooming locations (e.g., perineum, scrotum, etc.) were assessed.

Statistical Methods

Data analysis was conducted using the survey function in Stata v. 13.0 (Stata, StataCorp, College Station, TX, USA) to account for complex sampling design. Any p value less than .05 was considered statistically significant in univariate models and all statistical tests were two-sided. All missing

Table 1. Comparison of Demographic Characteristics Between Groomers and Nongroomers.

	Groomers, <i>n</i> = 2,120	Nongroomers, <i>n</i> = 2,034	<i>p</i>
Age	41.1 (40.6-41.6)	48.0 (47.5-48.6)	<.01
Race/ethnicity			
White	1,416 (66.8)	1,407 (69.2)	<.01
Black	215 (10.1)	288 (14.2)	
Other, non-Hispanic	84 (4.0)	63 (3.1)	
Hispanic	330 (15.6)	214 (10.5)	
Mixed races	75 (3.6)	62 (3.1)	
Education			
Less than high school	110 (5.2)	141 (6.9)	<.01
High school graduate	557 (26.3)	648 (31.9)	
Some college	610 (28.8)	530 (26.1)	
Bachelor's degree or higher	843 (39.8)	715 (25.2)	
Income (\$)			
<50,000	740 (34.9)	814 (40.0)	.08
50,000-74,999	452 (21.2)	399 (19.6)	
75,000-99,999	363 (17.1)	310 (15.2)	
>100,000	565 (26.7)	511 (25.1)	
Marital status			
Married/living with partner	1,391 (65.6)	1,328 (65.3)	.38
Widowed	15 (0.7)	25 (1.2)	
Divorced/separated	197 (9.3)	194 (9.5)	
Never married	517 (24.4)	487 (23.9)	
Location			
Northeast	356 (16.8)	354 (17.4)	.95
Midwest	543 (25.6)	517 (25.4)	
South	740 (34.9)	711 (35.0)	
West	481 (22.7)	452 (22.2)	
Other			
Baseline hairiness ^a	3.99 (3.94-4.05)	3.84 (3.78-3.90)	<.01
Partner hairiness ^a	2.26 (2.18-2.33)	2.19 (2.11-2.27)	.24
Genital satisfaction ^a	4.92 (4.88-4.97)	4.78 (4.74-4.83)	.01

Note. 44 Men refused to answer the question on grooming.

^aMeasured via Likert-type scales (1-7), genital satisfaction measured using the Index of Male Genital Image.

or incomplete data were excluded from the analyses. Only data from men were included in the analysis. Demographic characteristics and sexual characteristics were compared between groomers and nongroomers using chi-square tests. Continuous variables were compared using a two-sided student's *t* test. All variables with a *p* value less than <.10 in univariate models as well as variables thought to be suggestive of grooming were added to the multivariate logistic model. Multivariate logistic regression was used to see which factors have the greatest odds of the outcome of grooming. Due to the large sample size and multiple tests in the multivariate model, Bonferroni adjustments were made to the alpha-level to prevent Type I errors.

Results

Out of the original 7,580 subjects, 4,198 (55.4%) men completed the survey. The women responders were excluded

(*n* = 3,382 or 44.6%). Of these men, 2,120 (50.5%) reported regular pubic hair grooming. Demographic characteristics of male groomers and nongroomers are reported in Table 1. Men who groom were younger than men who do not groom (*M* = 41.1 vs. 48.0, respectively, *p* < .01). More groomers had a bachelor's degree or higher than nongroomers (39.8% vs. 25.2%, *p* < .01). Perceived hairiness was higher among groomers than nongroomers (*M* = 3.99 vs. 3.84, *p* < .01). Groomers reported a modestly higher genital satisfaction than nongroomers (*M* = 4.92 vs. 4.78, *p* = .01).

Sexual characteristics of male groomers and nongroomers are reported in Table 2. Groomers report more lifetime sexual partners, compared with nongroomers (24.4 vs. 18.2, *p* = .01). A larger proportion of groomers reported having sex with men than the proportion of nongroomers (6.2% vs. 2.2%, *p* < .01). A larger proportion of groomers report daily sex compared with nongroomers (4.7% vs. 3.2, *p* < .01). Similar proportions of groomers

Table 2. Comparison of Sexual Characteristics Between Groomers and Nongroomers.

	Groomers, <i>n</i> = 2,120	Nongroomers, <i>n</i> = 2,034	<i>p</i>
Number of partners ^a			
Sexual partners past year	2.29 (1.22-3.36)	1.38 (1.26-1.49)	.13
Lifetime sexual partners	24.4 (20.6-28.1)	18.2 (15.0-21.4)	.02
Sexual partner sex ^a			<.01
Men	129 (6.2)	44 (2.2)	
Women	1,738 (83.2)	1,514 (76.1)	
Both	25 (1.2)	13 (0.7)	
Not sexually active	197 (9.4)	418 (21.0)	
Frequency of sex ^a			<.01
Daily	88 (4.7)	48 (3.2)	
1-3 Times/week	1,009 (54.2)	668 (43.8)	
Monthly	519 (27.9)	478 (31.4)	
Less than monthly	245 (13.2)	330 (21.7)	
Sexual activities ^a			
Penetrative vaginal sex	1,676 (87.2)	1,388 (85.9)	.27
Penetrative anal sex	414 (21.5)	147 (9.1)	<.01
Performed oral genital sex	1,260 (65.5)	739 (45.7)	<.01
Received oral genital sex	1,403 (73.0)	850 (52.6)	<.01
Received anal sex	118 (6.1)	35 (2.2)	<.01
Performed oral anal sex	291 (15.1)	97 (6.0)	<.01
Received oral anal sex	171 (8.9)	54 (3.3)	<.01

Note. A student's *t* test was used for continuous variables (sexual partners); chi-square analysis was used for all other categorical variables.

^aMissing data excluded from the analysis.

report penetrative vaginal sex compared with nongroomers (87.2% vs. 85.9%, $p = .41$). Other various sexual behaviors were more common in groomers, such as receiving oral sex (73.0% vs. 52.6%, $p < .01$).

Results of the multivariable logistic regression for the outcome of grooming are reported in Table 3. The odds ratio (OR) for grooming with increasing age by 1 year was 0.95 (95% confidence interval [CI 0.94, 0.96]), $p < .001$. Men who report sexual activity 1 to 3 times per week have increased odds for grooming, $OR = 1.49$ (95% CI [1.20, 1.87]), compared with men who report sexual activity less than monthly. Men who reported performing oral genital sex and receiving oral genital sex compared with men who do not report those behaviors have increased odds for grooming, $OR = 1.46$ (95% CI [1.21, 1.75]) and $OR = 1.48$ (95% CI [1.22, 1.80]), respectively, with $p < .001$. There was no association of grooming with race or education level after adjusting for covariates.

Men report grooming their pubic hair for various reasons including sex and hygiene, comfort, and curiosity. Reasons for pubic hair grooming by age are reported in Figure 1. The majority of men report grooming in preparation for sexual activity with a peak prevalence of 73% among men aged 25 to 34 years. Less men report grooming for a trip to the doctor or for a surgical procedure with a peak prevalence of 18% among men aged 55 to 65 years. Other men report grooming due to comfort and/or

appearance with a peak prevalence of 9% among men aged 45 to 54 years.

Areas where men groom their pubic hair are reported in Figure 2. The majority (91%) of groomers remove the hair above the penis. Scrotal grooming was more prevalent among men aged 34 to 44 years, with a peak prevalence of 72%. Removing inner thigh hair seems to decrease with age, with a prevalence of 45% in 18- to 24-year-olds and a prevalence of 26% in 55- to 65-year-olds. Although less common, more than 10% of groomers in all age categories report grooming the hair around the anus. Twenty-four percent of groomers aged 25 to 34 years groom the area around the anus, and 11% of groomers aged 55 to 65 years groom the area around the anus.

Discussion

This is the first study to assess the prevalence and motivations of pubic hair grooming in a national, representative sample of U.S. men. Overall, pubic hair grooming in men is common. Grooming is more common in younger men. Certain sexual behaviors, especially receiving and giving oral sex, are associated with grooming. The top three motivations for grooming include sex, hygiene, and routine care. Most men who remove their pubic hair groom the hair above the penis, the scrotum, and the penile shaft.

Table 3. Multivariate Logistic Regression for Pubic Hair Grooming in the U.S. Male Population.

	Multivariate, OR [95% CI for OR]	<i>p</i>
<i>Demographics</i>		
Age ^a	0.95 [0.94, 0.96]	<.001 ^b
Education		
Less than high school	1.00 [reference]	
High school graduate	1.10 [0.76, 1.60]	.60
Some college	1.27 [0.87, 1.84]	.22
Bachelor's degree or higher	1.14 [0.79, 1.65]	.47
Race/ethnicity		
White	1.00 [reference]	
Black	0.69 [0.54, 0.89]	.004
Other, non-Hispanic	0.96 [0.63, 1.45]	.83
Hispanic	1.02 [0.80, 1.29]	.88
Mixed races	1.19 [0.76, 1.85]	.44
Other		
Baseline hairiness ^a	1.03 [0.98, 1.09]	.23
Genital satisfaction ^a	1.03 [0.95, 1.11]	.47
Lifetime number of sexual partners	1.00 [1.00, 1.00]	.25
<i>Sexual characteristics</i>		
Sexual partner		
Women	1.00 [reference]	
Men	1.36 [0.86, 2.15]	.19
Both	1.07 [0.49, 2.31]	.87
Sexual frequency		
Daily	1.32 [0.84, 2.07]	.23
1-3 Times per week	1.49 [1.20, 1.87]	<.001 ^b
Monthly	1.38 [1.10, 1.75]	.01
Less than monthly	1.00 [reference]	
Sexual behaviors		
Penetrative anal sex	1.50 [1.17, 1.92]	.002
Performed oral genital sex	1.46 [1.21, 1.75]	<.001 ^b
Received oral genital sex	1.48 [1.22, 1.80]	<.001 ^b
Received anal sex	1.12 [0.66, 1.90]	.66
Performed oral anal sex	1.42 [1.04, 1.93]	.03
Received oral anal sex	1.15 [0.75, 1.77]	.52

Note. OR = odds ratio; CI = confidence interval. Predictor variables selected for the multivariate model were significant ($p < .10$). Outcome is regular grooming (y/n).

^aPredictor is a continuous variable. ^bVariable is significant after Bonferroni correction with $\alpha = 0.05$ and 22 tests, $0.05/22 = 0.0023$.

The prevalence of pubic hair grooming (50.5%) in men reported in the current study is similar to that reported by Boroughs et al. (2005; 63.6%). Differences in these two estimates are likely due to different sample populations as well as the current study focused only on pubic hair grooming. Comparing the current results with work done in women, the authors demonstrate that the demographics and motivations for grooming are similar (Herbenick et al., 2010). Pubic hair removal in women is associated with younger ages, receiving cunnilingus, and a positive genital self-image (Herbenick et al., 2010). Grooming was associated with modestly higher genital satisfaction but this relationship did not persist after multivariable analysis. The prevalence of pubic hair grooming decreases with

age (Table 1). Pubic hair growth in both men and women peaks in the mid-20s and later declines (Ayob & Messenger, 2015; Hamilton, 1958). Increased hair growth at these earlier ages may in part explain a greater prevalence of grooming in younger ages.

It is well documented that pubic hair grooming is associated with sexual activity and behavior (DeMaria & Berenson, 2013; Gaither et al., 2015; Herbenick et al., 2010; Herbenick et al., 2013; Ramsey et al., 2009; Tiggemann & Hodgson, 2008). The majority of studies to date have been in women or gay men. The current study identifies that the number one motivation for grooming among men of all ages was sex. Interestingly, in the multivariate model, higher frequency of sexual activity was not associated with greater odds of

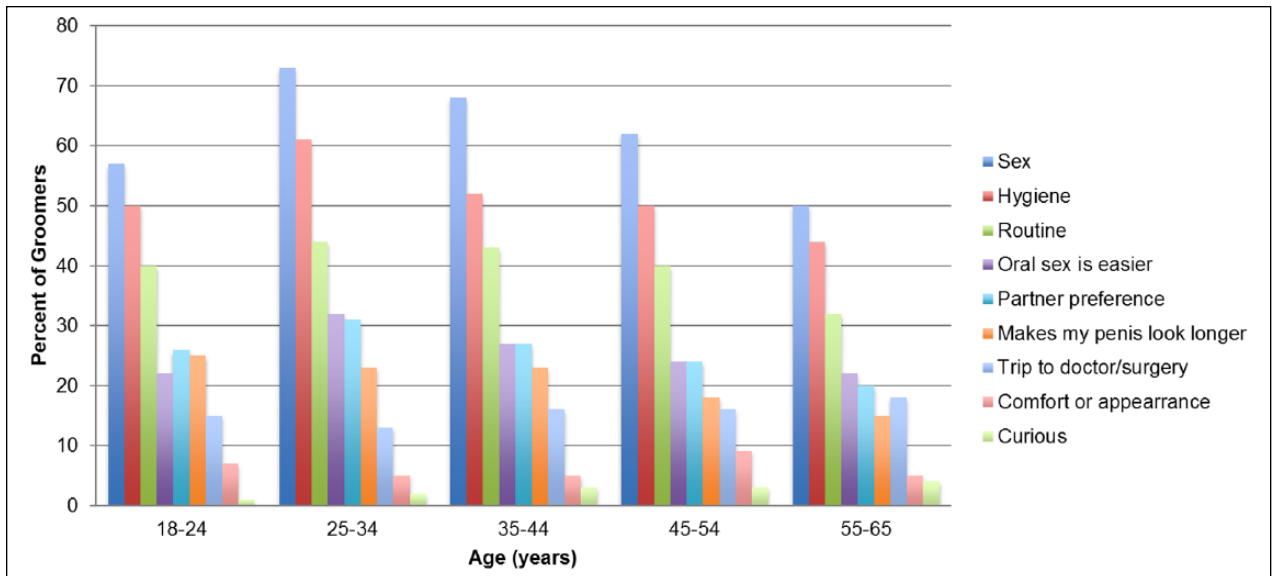


Figure 1. Reasons for male grooming by age in a nationally representative sample of U.S. men.

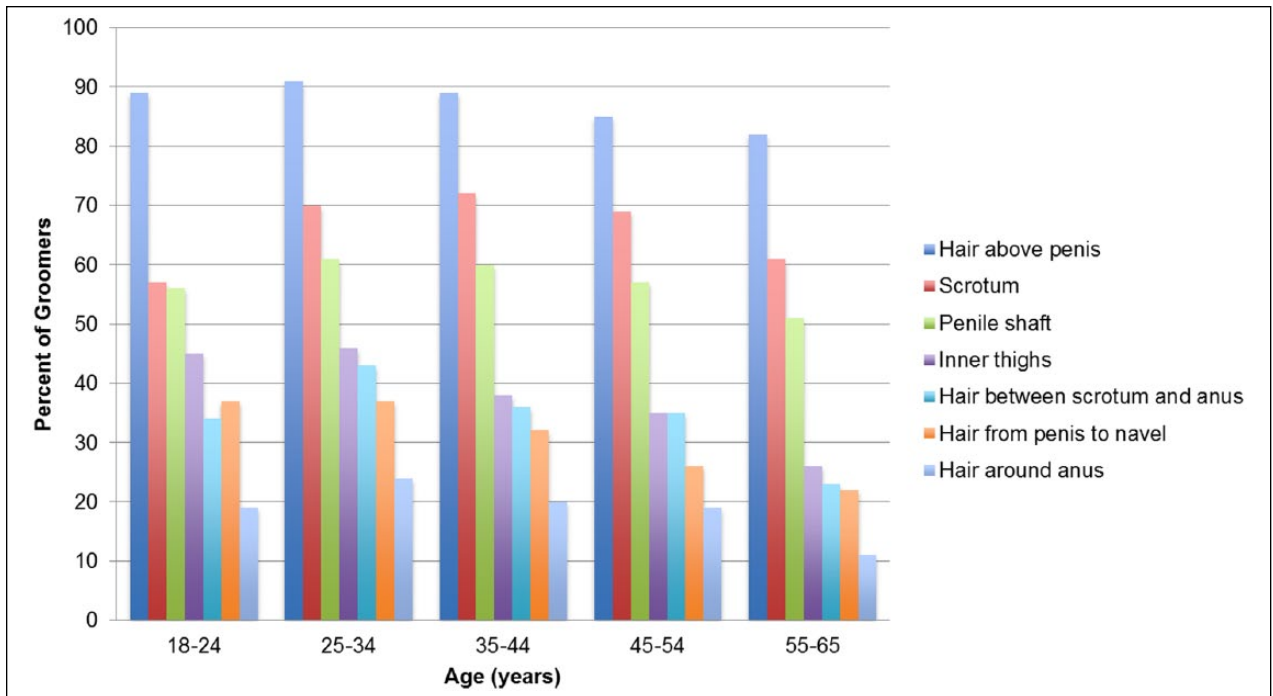


Figure 2. Areas men groom by age in a nationally representative sample of U.S. men.

grooming. This suggests that, although men might groom for sex, other aspects of sexual behavior beyond frequency might influence grooming. In particular, oral sex seems to be associated with grooming in the current study as well as another study in women (Herbenick et al., 2010). Additional research on motivations for pubic hair removal prior to oral sex is warranted; likely explanations include partner preference/ease and or general hygiene concerns.

Muscularity, weight, height, and penis size are related to overall male body image (Tiggemann, Martins, & Churchett, 2008). Grooming may play a role in male body image, as many college males report grooming for a drive of muscularity and physical appearance (Boroughs & Thompson, 2014). Perceived increase in physical appearance might be a reason that so many men groom for sex. Also, from Figure 1, about one in five men report

grooming because it makes their penis look longer, which may be another reason that so many men groom for sex. A common reason for grooming in women is concerns about perspiration and odor (Riddell, Varto, & Hodgson, 2010). The focus on hygiene as a reason to groom may be a male equivalent of this concern. Whether grooming actually decreases perspiration and odor has not been studied. Pubic hair grooming may also be a reflection of a religious hygienic teaching. For example, pubic hair shaving is recommended by the prophet Muhammad as part of an Islamic cleanliness teaching (Pfluger-Schindlbeck, 2006; Toerien & Wilkinson, 2004). Religious preferences were not captured by the current survey.

The strengths of this study include a large, nationally representative sample from a well-validated source. The external validity of the current study data is more robust than prior studies that have relied on convenience sampling in specific populations (Boroughs et al., 2005; Boroughs & Thompson, 2014; Martins et al., 2008). Participants completed the study via the Internet, which facilitates privacy and ease of access as the survey is of a

sensitive nature. However, the current study is not without limitations. Although some questions have been previously validated, the survey as a whole has not been validated. Given the sensitive nature of the survey, some participants may not have felt comfortable answering questions about sexual behavior and pubic hair grooming, which may be a reflection of the lower response rate (52.5%). Despite these limitations, the authors do believe the findings of this study add to the further understanding of pubic hair grooming characteristics among men. Results of this study may allow clinicians, sex educators, and therapists to better counsel and understand patients with grooming concerns (Porche, 2007).

Conclusions

Pubic hair grooming is common among men aged 18 to 65 years in the United States. Younger ages are associated with a greater prevalence of pubic hair grooming. Many men groom for sex, in particular oral sex, as well as for routine care and hygiene.

Appendix

The Survey Instrument Assessing Personal Grooming Characteristics and Grooming-Related Injuries and Infections



Personal Grooming Injuries
November 2013
- Questionnaire -

[DISPLAY]

Study Title: Pubic Hair Grooming Behaviors Among American Men and Women: A Study of Injuries Relating to Grooming Practices

Thank you for continuing to be part of the KnowledgePanel®.

This survey is being conducted by The University of California, San Francisco. The study will help researchers understand more about pubic hair grooming behavior among men and women in the United States. About 7,500 people will participate in this study.

What Will Happen if I Take Part in This Study? If you agree to be in this study, you will complete a survey online. It will take you about 5 to 10 minutes to complete the survey.

You will receive 1,000 points for completing this survey. (This is the cash equivalent of \$1.)

Are There Any Risks to Me or My Privacy? Some of the survey questions may make you feel uncomfortable or raise unpleasant memories. You are free to skip any question.

As with all KnowledgePanel surveys, your response to this survey, or any individual question in the survey, is completely voluntary. You will not be individually identified and your responses will be used for analyses only.

Your responses will be linked to an identification number. No identifiable information is associated with your responses.

Can I Say “No”? Yes, you do not have to complete a survey. All surveys, as well as all survey items, are completely voluntary. KnowledgePanel members are not required to participate in any particular survey to be eligible for and remain a member of the panel. Survey participants are able to stop at any time and finish the survey later within the data collection period. During that time, we send up to two e-mail reminder prompts to participants who have not completed the survey. No other action will be taken with nonrespondents.

Who Can Answer My Questions About the Study? If you have questions about your rights as a participant in this survey, or are dissatisfied at any time with any aspect of the survey, you may contact the KnowledgePanel Panel Member Support at 800-782-6899.

If you wish to speak directly to the investigator in charge of this study you can e-mail Dr. Benjamin Breyer, MD at BBreyer@urology.ucsf.edu.

If you wish to ask questions about the study or your rights as a research participant to someone other than the researchers or if you wish to voice any problems or concerns you may have about the study, please call the Office of the Committee on Human Research at 415-476-1814.

By Clicking the Next Button, You Are Giving Your Consent to Participate in the Study and Complete the Survey.

[DISPLAY]

This survey is aimed to gather information about pubic hair grooming behavior among [IF PPGENDER=1 INSERT: men/IF PPGENDER=2 INSERT: women]. We are particularly interested in understanding injuries related to pubic hair grooming and the situations in which these injuries may occur. All your responses are completely anonymous. Thank you for your honesty.

Please note that some questions in this survey contain drawings of genitalia, therefore we advise you take this survey in private.

[GRID; SP ACROSS]

Q1. On a scale from 1 to 7 . . .

	Currently do not have a partner/Don't know 0	Not at all hairy 1	2	3	Average hairiness 4	5	6	Very hairy 7
a. How hairy are you?	[DO NOT SHOW RADIO BUTTON HERE]							
b. How hairy is your partner?								

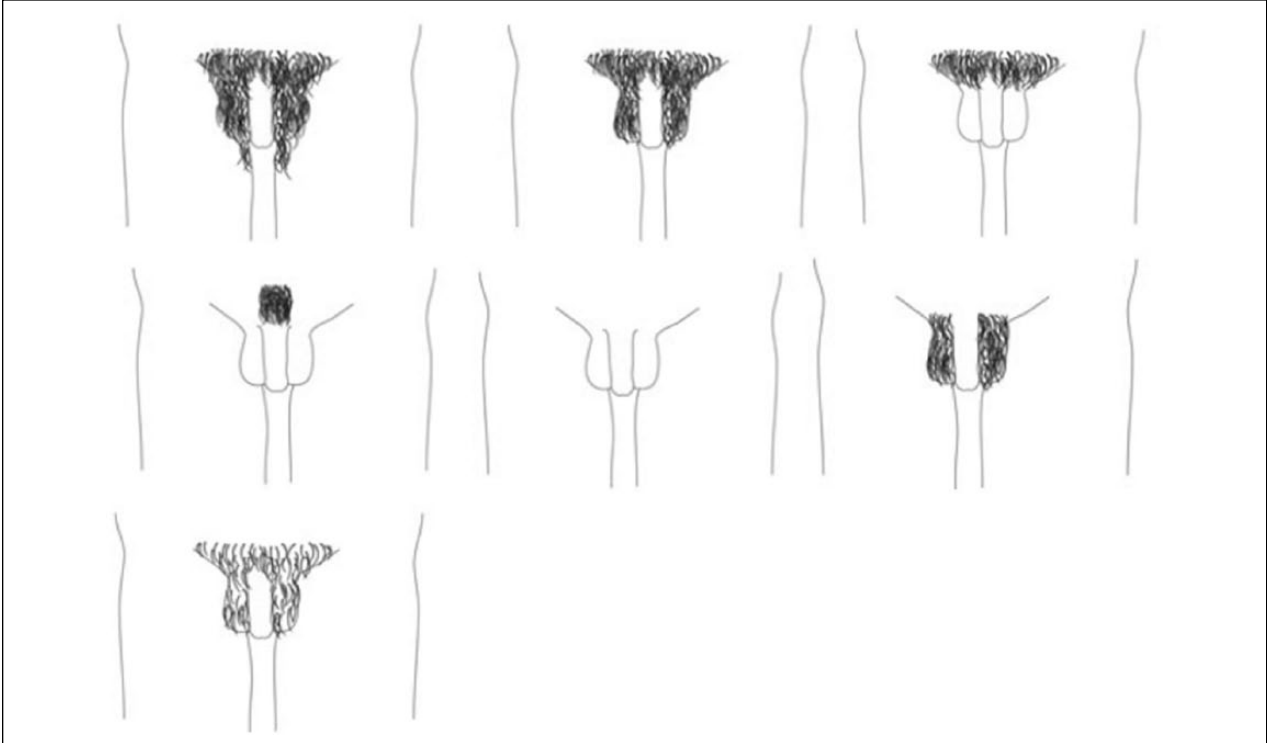
PROGRAMMING NOTE: FOR Q2, Q2A, AND Q2B, SHOW THE FOLLOWING TEXT AS A FOOTNOTE AT THE BOTTOM OF EACH SCREEN, ABOVE THE "NEXT" BUTTON:

Images adapted from Ramsey, S., Sweeney, C., Fraser, M., & Oades, G. (2009). Pubic hair and sexuality: A review. *Journal of Sexual Medicine*, 6, 2102-2110.

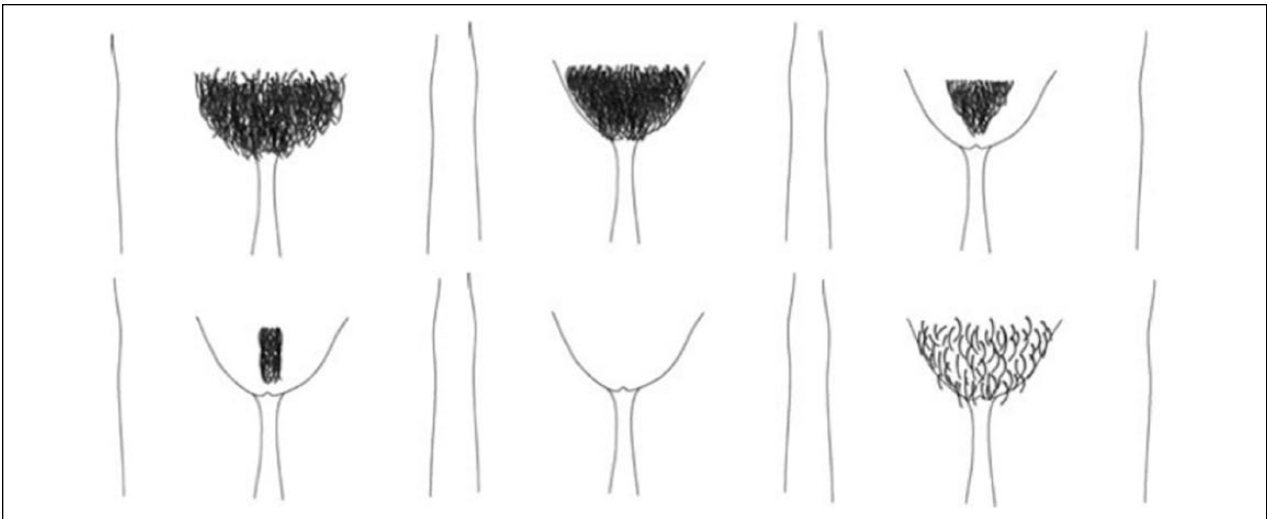
[SP; SHOW RADIO BUTTON BELOW EACH IMAGE]

Q2. Please select the image below which best represents your natural hair pattern.

[SHOW MALE IMAGES IF PPGENDER=1]

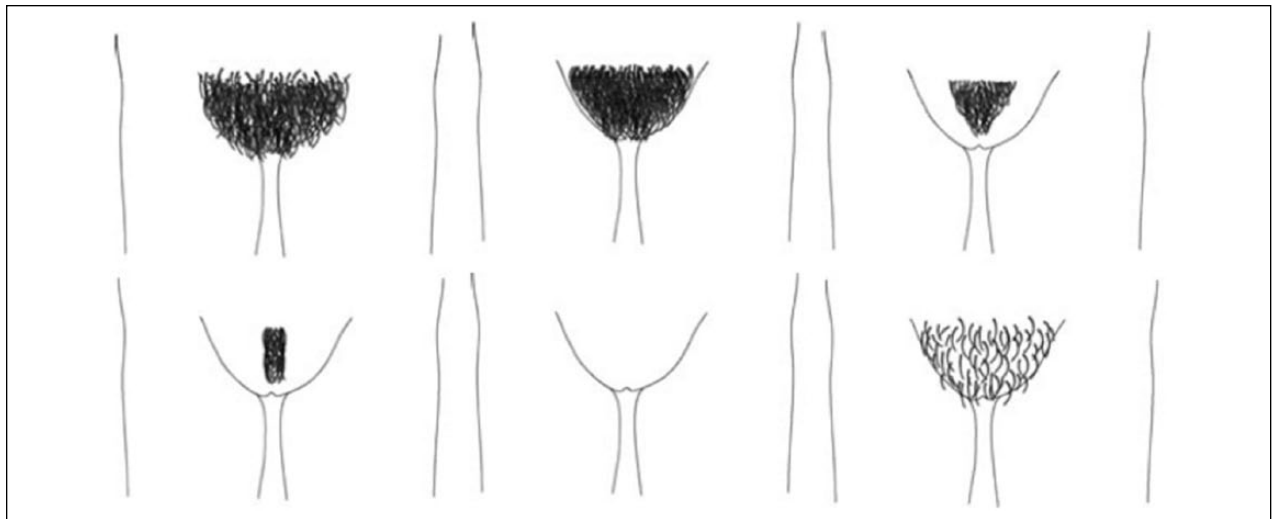


[SHOW FEMALE IMAGES IF PPGENDER=2]



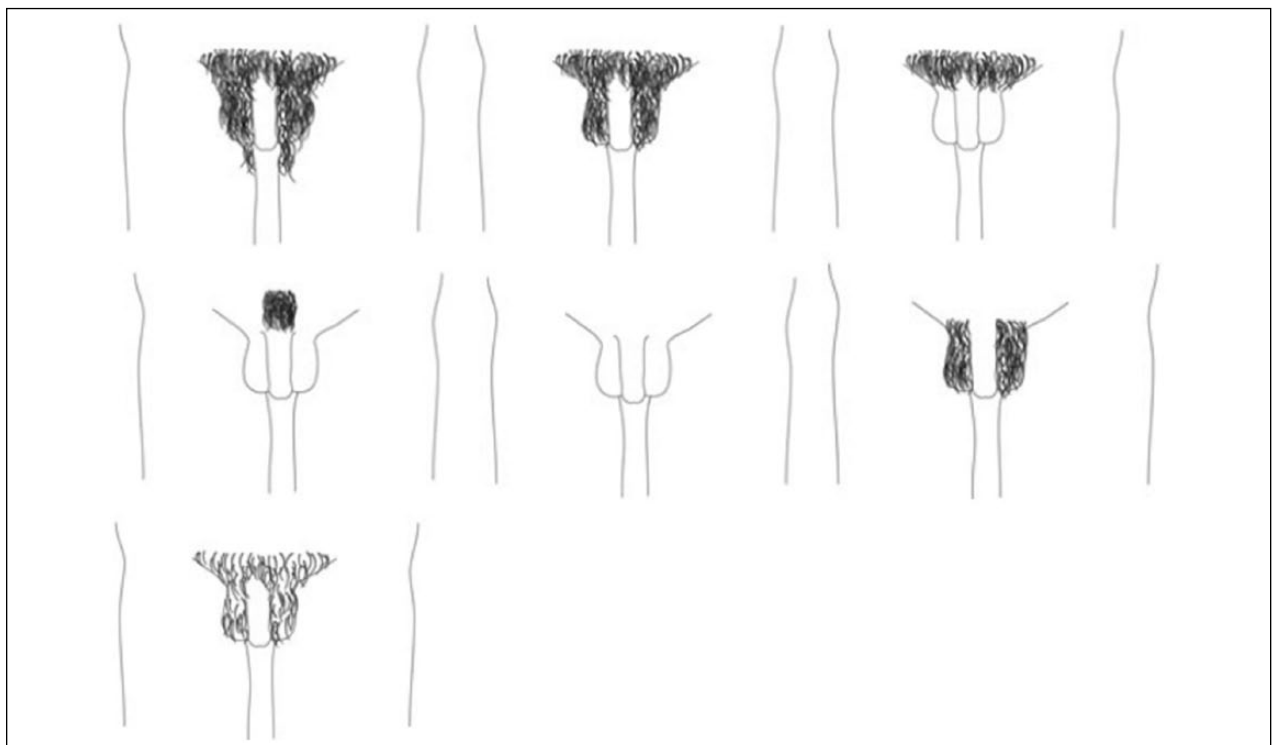
[SP; SHOW RADIO BUTTON BELOW EACH IMAGE]

Q2a. Please select the image below which represents your ideal female hair pattern.



[SP; SHOW RADIO BUTTON BELOW EACH IMAGE]

Q2b. Please select the image below which represents your ideal male hair pattern.



[SP]

Q3. Have you ever removed or trimmed your pubic hair?

1. Yes
2. No

[ONLY ASK Q4 TO Q17 ONLY IF Q3=1]

[SP]

Q4. Have you removed *some (not all)* of your pubic hair over the past year?

1. Not at all
2. 1 Time
3. 2-5 Times
4. 6-10 Times
5. 11+ Times

[SP]

Q5a. How regularly do you groom (remove or trim) your pubic hair?

1. Daily
2. Weekly
3. Monthly
4. Every 3-6 months
5. Every year
6. I do not groom regularly

[MP]

Q6a. Please select any and all events that you have trimmed or removed your pubic hair for. You may select more than one.

1. Sex
2. Trip to the doctor
3. Vacation
4. Other (please list) **[TEXT]**
5. I have never trimmed or removed my pubic hair for events. **[SP]**

[SP]

Q7. Have you ever removed all your pubic hair?

1. Not at all
2. 1 Time
3. 2-5 Times
4. 6-10 Times
5. 11+ Times

[MP]

Q9. What modes of pubic hair removal have you used?

1. Nonelectric blade razor with shaving cream
2. Nonelectric blade razor with soap
3. Electric razor with a guard

4. Electric razor without guard
5. Wax
6. Scissors
7. Electrolysis
8. Laser hair reduction
9. Other (please list) [TEXT]

[SP]

[ASK IF AT LEAST TWO SELECTIONS ARE MADE IN Q9 AND ONLY SHOW OPTIONS THAT ARE SELECTED IN Q9]

[IF ONLY ONE ANSWER IS SELECTED IN Q9, AUTOPUNCH THAT AS THE ANSWER IN Q8 AND SKIP Q8]

Q8. What is the mode of pubic hair removal that you *most often* use?

1. Nonelectric blade razor with shaving cream
2. Nonelectric blade razor with soap
3. Electric razor with a guard
4. Electric razor without guard
5. Wax
6. Scissors
7. Electrolysis
8. Laser hair reduction
9. Other (please list) [TEXT]

[MP]

Q10. Who performs your pubic hair grooming?

1. Self
2. Partner
3. Friend
4. Professionally done
5. Other (please list) [TEXT]

[MP]

Q11. What position(s) do you groom in?

1. Squatting
2. Sitting
3. Laying on back
4. Standing
5. Other (please list) [TEXT]

[MP]

Q12. Do you groom by direct visualization (either mirror or looking at the area) of the area you are grooming?

1. Mirror
2. Direct visualization of genitals
3. Don't look, just feel

[MP]

[ASK IF PPGENDER=1]

Q13a. Areas that I groom:

1. Hair above penis
2. Penile shaft
3. Hair from penis to navel ("happy trail")
4. Scrotum
5. Inner thighs
6. Hair between scrotum and anus
7. Hair around anus
8. Buttocks

[MP]

[ASK IF PPGENDER=2]

Q13b. Areas that I groom:

1. Hair above vagina
2. Hair around vagina
3. Hair below belly button
4. Inner thighs
5. Hair around anus
6. Buttocks
7. Hair between vagina and anus

[NUMBER BOX; RANGE 1-100]

Q14. How old were you when you first started pubic hair grooming?

[SP]

Q15. Who introduced you to pubic hair grooming?

1. Friend
2. Partner
3. Myself
4. Saw on TV/movie/magazine
5. Other (please list) [TEXT]

[MP]

Q16. Why do you groom your pubic hair?

1. Part of grooming routine
2. Hygienic/cleaner
3. Partner prefers this
4. [INSERT IF PPGENDER=1: Makes my penis look longer/INSERT IF PPGENDER=2: Makes my vagina look nicer]
5. Oral sex is easier
6. Anal sex is easier
7. History of pubic lice/STI
8. Other (please list) [TEXT]

[SP]

Q17. Have you ever had a pubic hair grooming–related injury such as a cut, burn, rash, laceration with blood, injury requiring medical care, infection, abscess, other not listed?

1. Yes
2. No

[PROGRAM NOTE: ONLY ASK Q23 TO Q25 IF Q17=1]

[SP]

Q23. Have you experienced a pubic hair grooming injury more than once?

1. Yes
2. No

[IF Q23=1]

[NUMBER BOX; RANGE 2-100]

Q23a. How many times have you experienced a pubic hair grooming injury?

[IF Q23=1]

[MP]

Q18. What grooming instrument were you using when you were injured? (If you have been injured more than once, please select all instruments that apply.)

1. Nonelectric blade razor with shaving cream
2. Nonelectric blade razor with soap
3. Electric razor with a guard
4. Electric razor without guard
5. Wax
6. Scissors
7. Electrolysis
8. Laser hair reduction
9. Other (please list) [TEXT]

[NUMBER BOX; INSERT ALL ITEMS SELECTED IN Q18]

Q19. How long had you been performing pubic hair grooming before you were injured? (If you have been injured more than once, please list the duration of time you have been grooming for each injury.)

[INSERT Q18] _____ year(s) [RANGE: 0-65]

[INSERT Q18] _____ year(s) [RANGE: 0-65]

[INSERT Q18] _____ year(s) [RANGE: 0-65]

[MP]

Q20. What was your pubic hair grooming injury? (If you have been injured more than once, please select all injuries that apply.)

1. Burn
2. Rash
3. Laceration with blood

4. Injury requiring medical care
5. Infection
6. Abscess
7. Other (please list) [TEXT]

[MP]

Q21. Where were you injured? (If you have been injured more than once, please select all locations that apply.)

1. [INSERT IF PPGENDER=1: Scrotum/INSERT IF PPGENDER=2: Labia majora]
2. [INSERT IF PPGENDER=1: Penis/INSERT IF PPGENDER=2: Labia minora]
3. Anus
4. Perineum (area between the [INSERT IF PPGENDER=1: penis/INSERT IF PPGENDER=2: vagina] and anus)
5. Inner thigh
6. Pubis (area above [INSERT IF PPGENDER=1: penis/INSERT IF PPGENDER=2: vagina])
7. Other (please list) [TEXT]

[SP]

Q22. Have you ever sought or needed medical treatment for a pubic hair grooming injury?

1. Yes
2. No

[SP]

Q24. Have you ever required antibiotics for a pubic hair grooming injury?

1. Yes
2. No

[SP]

Q25. Have you ever required a surgical procedure for a pubic hair grooming injury including abscess drainage, stitches other intervention?

1. Yes
2. No

[SP]

Q26. Do you have a history of skin infections/abscesses anywhere on your body?

1. Yes
2. No

[SP]

Q27. Have you ever been diagnosed with a bacterial infection called MRSA (Methicillin-resistant Staphalacoccus Aureus)?

1. Yes
2. No

[MP]

Q28. In the past 6 months have you . . . ?

1. Worked in a hospital
2. Been hospitalized
3. Worked in a nursing home or long care facility
4. Been admitted to a nursing home or long care facility
5. Participated in contact sports
6. Participate in a military training camp or lived in military barracks
7. Worked in a jail or prison
8. Been imprisoned or jailed
9. Worked in a child care or day care center
10. None of the above [SP]

[SP]

Q29. Do you have (a) regular sexual partner/partners?

1. Yes
2. No

[IF Q29=1]

[SP]

Q30. Does/do your partner(s) prefer your pubic hair to be groomed?

1. Yes
2. No
3. Unsure
4. Unsure but I think they do

[SP]

Q31. Do you prefer your sexual partner(s) to perform pubic hair grooming?

1. Yes
2. No
3. Doesn't matter
4. I'm not sexually active

[NUMBER BOX; RANGE: 0-100]

Q32. How many times per week does someone other than yourself see you naked?

[GRID; SP ACROSS]

[ASK IF PPGENDER=1]

Q33a. How satisfied are you on a scale from 1 to 7 with your . . .

Extremely dissatisfied	Very dissatisfied	Somewhat dissatisfied	No feeling one way or the other	Somewhat satisfied	Very satisfied	Extremely satisfied
1	2	3	4	5	6	7

- a. Length of erect penis
- b. Girth of erect penis
- c. Size of flaccid penis
- d. Color of genitals
- e. Shape of glans (head)
- f. Location of urethra
- g. Texture of skin
- h. Curvature of penis
- i. Circumcision status
- j. Size of testicles
- k. Genital veins
- l. Amount of pubic hair
- m. Amount of semen
- n. Scent of genitals

[GRID; SPACROSS]
[ASK IF PPGENDER=2]

Q33b. On a scale from 1 to 7, how much do you agree or disagree with the following statements?

Strongly disagree		Disagree	Neutral	Agree		Strongly agree
1	2	3	4	5	6	7

- a. I feel positive about my genitals.
- b. I am satisfied with the appearance of my genitals.
- c. I would feel comfortable letting a sexual partner look at my genitals.
- d. I think my genitals smell fine.
- e. I think my genitals work the way they are supposed to work.
- f. I feel comfortable letting a health care provider examine my genitals.
- g. I am not embarrassed about my genitals.

[GRID; SPACROSS]

Q34. On a scale from 1 to 7, how much do you agree or disagree with the following statements?

Strongly disagree		Disagree	Neutral	Agree		Strongly agree
1	2	3	4	5	6	7

- a. I groom because my partner expects it.
- b. Sex is better when I groom.
- c. My [INSERT IF PPGENDER=1: penis looks longer/INSERT IF PPGENDER=2: vagina looks better] when I groom.
- d. I [INSERT IF PPGENDER=1: look better/INSERT IF PPGENDER=2: feel sexier] when I groom.
- e. I feel younger when I groom.
- f. I'm embarrassed if people see me when I HAVE groomed.
- g. I'm embarrassed if people see me when I have NOT groomed.
- h. Most [INSERT IF PPGENDER=1: men/INSERT IF PPGENDER=2: women] groom their pubic hair.

[GRID; SP ACROSS]

Q35. Please select Yes or No for the following.

Yes	No
-----	----

- a. My best friend grooms.
- b. My partner grooms.

[SP]

Q36. Are you sexually active with . . . ?

1. Men
2. Women
3. Both
4. Not sexually active

[ASK IF (Q36=1-3 OR REFUSED) AND PPGENDER=1]

[MP]

Q37a. Sexual activities you have engaged in over the past year:

1. Penetrative vaginal sex
2. Penetrative anal sex
3. Performed oral genital sex (felatio/"blowjob" or cunnilingus)
4. Received oral genital sex (felatio or "blowjob")
5. Received anal sex
6. Performed oral anal sex (analingus or "rimming")
7. Received oral anal sex (analingus or "rimming")

[ASK IF (Q36=1-3 OR REFUSED) AND PPGENDER=2]

[MP]

Q37b. Sexual activities you have engaged in over the past year:

1. Receptive vaginal sex
2. Receptive anal sex
3. Performed oral genital sex (felatio/"blowjob" or cunnilingus)
4. Received oral genital sex (cunnilingus)
5. Performed oral anal sex (analingus or "rimming")
6. Received oral anal sex (analingus or "rimming")

[ASK IF (Q36=1-3 OR REFUSED)]

Q38. Frequency of sexual activity:

1. Daily
2. 1-3 Times per week
3. Monthly
4. Every 3 months or less often

[ASK IF (Q36=1-3 OR REFUSED)]

[NUMBER BOX; RANGE: 0-1000]

Q39a. Number sexual partners in the past year:

[ASK IF (Q36=1-3 OR REFUSED)]

[NUMBER BOX; RANGE: 1-1000]

Q39b. Number sexual partners in your lifetime:

[SP]

Q40. Have you ever had this skin condition called mulluscum contagiosum?

1. Yes
2. No



[SP]

Q41. Have you ever contracted a sexually transmitted disease?

1. Yes
2. No

[IF Q41=1]

[SP]

Q42. What is the total number of STDs that you have had in your lifetime?

1. 1
2. 2-3
3. 4-6
4. 7-10
5. Greater than 10

[IF Q41=1]

[MP]

Q42a. Do you or have you ever had the following infections?

1. Human immunodeficiency virus (HIV)
2. Chlamydia
3. Gonorrhea
4. Syphilis
5. Human papilloma virus (HPV)
6. Genital herpes (HSV)
7. Vaginal warts
8. Anal warts
9. Lice (crabs)
10. Mulluscum contagiosum

11. None of the above [SP]

[IF Q41=1]

[SP]

Q43. Were you performing pubic hair grooming at the time of your STD infection?

1. Yes
2. No
3. Unsure

[IF Q43=1]

[MP]

Q44. What method(s) of hair removal were you using at the time of your STD infection?

1. Nonelectric blade razor with shaving cream
2. Nonelectric blade razor with soap
3. Electric razor with a guard
4. Electric razor without guard
5. Wax
6. Scissors
7. Electrolysis
8. Laser hair reduction
9. Other (please list) [TEXT]

[KN STANDARD CLOSE]

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References

- Ayob, S., & Messenger, A. (2015). Androgens, hair loss and eugenics: A tale of discovery and American social history. *Experimental Dermatology, 24*, 412-413.
- Boroughs, M., Cafri, G., & Thompson, J. (2005). Male body depilation: Prevalence and associated features of body hair removal. *Sex Roles, 52*, 637-644.
- Boroughs, M., & Thompson, J. (2014). Correlates of body depilation: An exploratory study into the health implications of body hair reduction and removal among college-aged men. *American Journal of Men's Health, 8*, 217-225.
- Chang, L., & Krosnick, J. (2009). National surveys via RDD telephone interviewing versus the Internet comparing sample representativeness and response quality. *Public Opinion Quarterly, 73*, 641-678.
- Davis, S., Paterson, L., & Binik, Y. (2012). Male genital image: Measurement and implications for medical conditions and surgical practice. *Sexologies, 21*, 43-47.
- DeMaria, A., & Berenson, A. (2013). Prevalence and correlates of pubic hair grooming among low-income Hispanic, Black, and White women. *Body Image, 10*, 226-231.
- DeMaria, A., Flores, M., Hirth, J., & Berenson, A. (2014). Complications related to pubic hair removal. *American Journal of Obstetrics & Gynecology, 210*, 528.e521-528.e525.
- Gaither, T., Truesdale, M., Harris, C., Alwaal, A., Shindel, A., Allen, I., & Breyer, B. (2015). The influence of sexual orientation and sexual role on male grooming-related injuries and infections. *Journal of Sexual Medicine, 12*, 631-640.
- Glass, A., Bagga, H., Tasian, G., Fisher, P., McCulloch, C., Blaschko, S., & Breyer, B. (2012). Pubic hair grooming injuries presenting to U.S. emergency departments. *Urology, 80*, 1187-1191.
- Hamilton, J. (1958). Age, sex and genetic factors in the regulation of hair growth in man: A comparison of Caucasian and Japanese populations. In W. Montagna & R. A. Ellis (Eds.), *The biology of hair growth* (pp. 399-433). New York, NY: Academic Press.
- Herbenick, D., Hensel, D., Smith, N., Schick, V., Reece, M., Sanders, S., & Fortenberry, J. (2013). Pubic hair removal and sexual behavior: Findings from a prospective daily diary study of sexually active women in the United States. *Journal of Sexual Medicine, 10*, 678-685.
- Herbenick, D., Schick, V., Reece, M., Sanders, S., & Fortenberry, J. (2010). Pubic hair removal among women in the United States: Prevalence, methods, and characteristics. *Journal of Sexual Medicine, 7*, 3322-3330.

- Knowledge Panel Design Summary. (2013). Retrieved from [http://www.knowledgenetworks.com/knpanel/docs/knowledgePanel\(R\)-design-summary-description.pdf](http://www.knowledgenetworks.com/knpanel/docs/knowledgePanel(R)-design-summary-description.pdf)
- Martins, Y., Tiggemann, M., & Churchett, L. (2008). Hair today, gone tomorrow: A comparison of body hair removal practices in gay and heterosexual men. *Body Image, 5*, 312-316.
- Pfluger-Schindlbeck, I. (2006). On the symbolism of hair in Islamic societies: An analysis of approaches. *Anthropology of the Middle East, 1*(2), 72-88.
- Porche, D. (2007). Male body depilation. *Journal for Nurse Practitioners, 3*, 14-15.
- Ramsey, S., Sweeney, C., Fraser, M., & Oades, G. (2009). Pubic hair and sexuality: A review. *Journal of Sexual Medicine, 6*, 2102-2110.
- Riddell, L., Varto, H., & Hodgson, Z. (2010). Smooth talking: The phenomenon of pubic hair removal in women. *Canadian Journal of Human Sexuality, 19*, 121-130.
- Tiggemann, M., & Hodgson, S. (2008). The hairlessness norm extended: Reasons for and predictors of women's body hair removal at different body sites. *Sex Roles, 59*, 889-897.
- Tiggemann, M., Martins, Y., & Churchett, L. (2008). Beyond muscles: Unexplored parts of men's body image. *Journal of Health Psychology, 13*, 1163-1172.
- Toerien, M., & Wilkinson, S. (2004). Exploring the depilation norm: A qualitative questionnaire study of women's body hair removal. *Qualitative Research in Psychology, 1*, 69-92.
- Vannier, S., Currie, A., & O'Sullivan, L. (2014). Schoolgirls and soccer moms: A content analysis of free "teen" and "MILF" online pornography. *Journal of Sex Research, 51*, 253-264.