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Body Art: Attitudes and Practices Regarding Body Piercing Among Urban Undergraduates

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Objective: To describe the knowledge, attitudes, and practices of young adults toward body piercing.

Methods: An anonymous 30-item survey was given to 103 undergraduate students at the campus health service of a large urban university. The questionnaire collected data on students' perceptions regarding the social acceptability of body piercing, their experiences with and attitudes toward this form of body art, and their knowledge of associated health risks.

Results: One hundred (97%) out of the 103 surveys distributed had sufficient data for analysis. Fifty-six percent of participants (age range, 17 to 25 years) reported having a body piercing at one time. Participants with a piercing were more likely to have a tattoo (OR, 4.13; 95% CI, 1.10-15.56; P=.04). The majority of participants (65 [78%]) reported "liking" body piercing on others, though a smaller percentage (45 [52%]) reported "liking" it on themselves (z=3.58, P<.001). Participants estimated the chance of potential health risks as a result of body piercing as follows: bleeding (60%), infection (56%), keloid scarring (43%), bruising (41%), allergic reaction (38%), cyst or tetanus (each 24%), hepatitis B (20%), and human immunodeficiency virus (16%). Nonpierced participants assessed the probability of adverse events as a result of body piercing at 43%, whereas their pierced counterparts estimated the risk at 30% ($F_{1,83}$14.06, P<.001). Forty-three percent of all participants reported knowing someone (ie, other than themselves) who experienced a health problem as a result of body piercing, though few (10 of 52 [19%]) pierced participants reported similar personal experiences.

Conclusions: Young adults believe that body piercing is highly acceptable among the general public. Furthermore, though they believe such body art is acceptable on others, they feel it is less acceptable on themselves. Study participants displayed a high level of awareness regarding the potential health risks of body art, and, in fact, overestimate those risks. Implications for patient education are addressed.

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The number of young adults acquiring body piercing has increased in recent years.[1-3] In fact, body piercing may now be considered a mainstream activity among older adolescents and young adults (age range, 17 to 25 years) in Western society.[4,5] In a 2001 survey of 454 university undergraduates, Mayers and colleagues[6] found that 232 (51%) participants reported currently or previously having a body piercing. In a survey of 450 students at a large state-supported university, Armstrong and coauthors[7] found that 144 (32%) participants currently had a body piercing. An additional 59 (13%) participants had a piercing site which they were no longer adorning with jewelry.[7]

As the prevalence of body art has increased, adverse health risks associated with body piercing have been documented. Common health risks associated with body piercing include: infection, pain, bleeding, hematoma formation, cyst formation, allergic reaction, hypertrophic scarring, and keloid formation.[8-21] Infection severity ranges from local infections (eg, impetigo and cellulitis) to more extensive—even systemic—infections such as osteomyelitis, toxic shock syndrome, and bacteremia.[13,22] Life-threatening infections as a result of complications associated with body piercing include septic arthritis, acute glomerulonephritis, endocarditis, and hepatitis B.[8,13,17,18,23,24] Hepatitis C transmission has also been cited as a potential complication.[14,15,19,20] Finally, though there have been no confirmed cases of human immunodeficiency virus contracted through the use of contaminated body piercing instruments, experts agree that it is a possibility,[11] and the authors of one case report have hypothesized this link.[16]

Case reports have also documented several site-specific health risks from body piercing. The most common among these is infection of auricular cartilage after ear piercing.[13,21] Multiple dental complications after oral piercing have been noted in the literature, including dental fractures,[25,26] gum erosion,[27] speech impediment,[28] and jewelry aspiration.[12,28,29] In fact, negative complications arising from oral piercing are

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so numerous—and in some cases life-threatening—that the American Dental Association has issued a formal statement opposing the practice.[30]

Studies have also noted a potential correlation between body piercing and other risk-taking behaviors in adolescents and young adults. When Forbes[31] surveyed 341 college students (age range, 18 to 49 years) at a large public university, he found statistically significant differences in risk-taking behaviors between men and women with body modifications (eg, tattoos and body piercing) versus those without them. Both men and women with body modifications reported more frequent alcohol intoxication, more traffic tickets, and more marijuana use than their "unadorned" counterparts. Braithwaite and colleagues,[32] in their 2001 survey of 860 adolescent detainees (age range, 11 to 18 years), described a statistically significant association (P=.052) between body piercing and alcohol use.

More recent surveys of adolescents and young adults suggest an even stronger correlation between body piercing and increased risk-taking behaviors. Carroll and colleagues[1] surveyed 552 adolescents and young adults (age range, 12 to 22 years) at a medical clinic for military dependents and found that teenagers who participate in tattooing or body piercing were significantly more likely to engage in risk-taking behaviors such as drug use (P<.001) and disordered eating behaviors (P=.003). In addition, subjects with these forms of body art were found to have higher rates of suicidal ideation and suicide attempts (P=.028) than those without.[1] In a 2004 survey of college students, Armstrong and coauthors[7] found that factors used to describe overall risky behavior (ie, high number of sexual partners, heavy alcohol consumption, cigarette smoking, drug use, and tattoos) were more commonly found among students with body piercing when compared with those who had never been pierced. A survey of 2180 students (age range, 12 to 18 years) conducted by Deschesnes and colleagues[33] further supports this finding. Their 2006 study reported that certain "externalized" risk behaviors were more commonly associated with tattooed and pierced youth than with their unmodified counterparts, including the use of drugs, gang affiliation, school truancy, and problem gambling.[33]

To capture a broader spectrum of adolescents while controlling for sociodemographic factors, Roberts and colleagues[34] analyzed data from the 4337 individuals (age range, 13 to 18 years) who participated in the National Longitudinal Study of Adolescent Health. The results of their study found that body piercing was significantly associated with a history of sexual intercourse (odds ratio [OR], 4.5; 99% confidence interval [CI], 2.1-10.0), recent smoking (OR, 3.1; 99% CI, 1.6-5.9), school truancy (OR, 2.6; 99% CI, 1.3-5.3), running away from home (OR, 3.0; 99% CI, 1.2-7.2), suicidal ideation (OR, 2.5; 99% CI, 1.2-4.9), and suicide attempts (OR, 3.0; 99% CI, 1.2-7.5).

To better characterize the patient population acquiring body art, studies have attempted to explore the underlying attitudes and ideas surrounding body-modification activities. Millner and Eichold[4] surveyed 81 subjects (age range, 19 to 55 years) recruited through body art shops. After two surveys were omitted for incomplete reporting, data from 79 participants found that key motivating factors for obtaining body piercing were individual expression (62%) and art (43%). Less common motivations included the perception that body piercing is sexy and beautiful, and that it is a form of celebration. In 1996, Armstrong[5] described the personal experiences of high school students with body piercing. Their reasons for obtaining body piercing included "it is a form of body art," "it is fashionable," "it makes a personal statement," and "it is daring." In a more recent study conducted by Armstrong and colleagues,[7] the most commonly reported motivations for body piercing among college students included "uniqueness" and "to be myself."

Furthermore, young adults with body piercing tend to perceive their pierced anatomic site as more acceptable to the general public than do nonpierced youths. Gold and colleagues[35] surveyed 225 participants (age range, 12 to 22 years) from an urban, hospital-based adolescent health clinic and found that 45% to 62% of participants endorsed most piercing sites as "accepted by the general public"—with the exception of nipple and genital sites, which fewer than 10% of participants endorsed as accepted. Their study also found that black participants were more likely to have pierced noses and to find that particular anatomic site socially acceptable, while white participants were more likely to have pierced navels or nipples and to find those anatomic sites acceptable (OR range, 3.05-19.37).

Gold and colleagues[35] also found that pierced youth were not only more likely to see their own piercing site as more socially acceptable than the sites selected by other pierced individuals, they were also more likely to see their own piercing site as having less risk of health complications than the alternative piercing sites of others (OR range, 8.99-23.61; effect sizes [r] range, 0.15-0.60). Overall, however, the perceived risk of complications from body piercing among this demographic group was significantly higher than the actual prevalence of complications noted in the study.[35] As reported from personal experience, the most common health problems associated with body piercing were: infection (10%), allergic reaction (1%), and bruising (1%).[35]

Given both the prevalence of body piercing and the list of documented risks and complications, it is important for family physicians to understand the pierced patient population to better serve their medical needs. The present study expands on the existing medical literature available regarding the attitudes of undergraduate students toward body piercing and their piercing habits. In addition, the current study sheds light on this demographic group's awareness of and experi-

ences with the possible health consequences of this form of body art.

Methods

We surveyed a convenience sample of 103 college students who entered the waiting area of a campus student health center at a state-supported urban university on seven afternoons between December 2003 and March 2004. Although an effort was made to vary the day of the week as much as possible, afternoons were selected based on the availability of the primary investigator (C.M.S.). The primary investigator administered the anonymous survey to every student who entered the waiting area of the clinic prior to an office visit. No incentives were provided for completion of the survey. The institutional review board of the University of Pittsburgh (Pa) approved study protocols with a waiver of parental consent for participants younger than 18 years. Written consent was waived for all study participants.

The 30-item questionnaire was adapted from the survey previously used by Gold and colleagues,[35] and took approximately 10 minutes to complete. The survey was pretested with 10 adolescents and young adults (age range, 14 to 18 years) in a clinical setting. Based on their feedback, adjustments were made to the survey instrument to clarify instructions and the wording of the questions. The questionnaire assessed demographic information including age, sex, racial/ethnic background, and sexual orientation. All participants, regardless of piercing status, were asked about their attitudes toward body piercing on themselves and others. Percent-risk scales of potential health consequences from body piercing were presented in a linear, visual analog scale format ranging from 0% (no chance of risk) to 100% (certain risk). Participants were asked to draw a dot on the ruler to reflect their perceptions of each health risk associated with body piercing.

Because earlobe piercing is commonplace among women in Western society, for the purposes of our study we defined "body piercing" on a woman as any piercing of the body, *excluding* the earlobe—though ear cartilage piercing would be included in "body piercing" for women. For men, we defined "body piercing" as any piercing of the body, *including* the earlobe.

Participants were also queried as to their attitudes toward body piercing and their awareness of the potential for associated health problems. Comparisons were made between participants aged 17 to 20 years and those aged 21 to 25 years, between men and women, and between those who had body piercing and those who did not. Hypotheses comparing dichotomous outcome variables were tested using χ^2 tests and logistic regression analysis, reporting odds ratios of differences between compared groups. Hypotheses comparing participant endorsements of different body-modification activities were tested using the Wilcoxon signed rank test within the entire sample. Hypotheses comparing multiple continuous variables were tested using repeated measures analysis of variance. When multiple comparisons were made, we used a conservative α level of .01 to guard against type I error.

Results

A total of 105 young adults (age range, 17 to 25 years) were asked to participate in the present survey-based study. One hundred three students agreed to participate (*Table 1*). Reasons for refusal were "insufficient time" to complete the survey prior to the scheduled office visit and "feeling too ill" to participate. Three of the surveys collected were missing 75% or more of the data and were excluded from further analysis, leaving 100 usable surveys. There were no statistically significant differences in piercing rates by age, sex, race/ethnicity, or sexual orientation.

Generally, on a purely hypothetical level, the majority (65 [78%]) of young adults reported "liking" body piercing on others, while fewer (45 [52%]) reported liking it on themselves (z=3.58, P<.001). Pierced participants were more apt than nonpierced participants to report liking body piercing on themselves (80% vs 14%, OR, 25.60; 95% CI, 7.95-82.47) and on others (90% vs 62%, OR, 5.45; 95% CI, 1.72-17.29). Women were more inclined than men to report liking body piercing on themselves (64% vs 32%, OR, 3.74; 95% CI, 1.50-9.31). They were not, however, apt to report liking it on others (P=.563). Younger participants (age range, 17 to 20 years) were not likely to approve of body piercing on themselves (P=.467), though they were more likely than older participants (age range, 21 to 25 years) to approve of these modifications on others (90% vs 67%,OR, 4.63; 95% CI, 1.37-15.59). There were no statistically significant effects of race/ethnicity on the probability of liking body piercing on oneself or others.

Most young adults (98%) perceived at least one piercing site to be "accepted by the general public," including: navel (87%), men's earlobe (77%), ear cartilage for both sexes (71%), nose (44%), tongue (33%), eyebrow (30%), nipple (12%), lips (11%), chin (4%), and genital area (female, 3%; male, 2%). From a list of 11 options, participants listed an average of 3.8 sites as socially acceptable. There were no statistically significant differences between pierced and nonpierced participants regarding the social acceptability of various body piercing sites (P=.606).

A total of 56 participants reported having a body piercing at one time, and 16 participants reported having a tattoo. The mean age at first body piercing was 17 years (age range, 11 to 22 years). The mean age at first tattoo was 19 years (age range, 14 to 22 years). Three participants reported having a tattoo, but not a piercing; 13 participants had both a tattoo and piercing. Only one participant reported having a branding, which is a mark (eg, symbol, ornamental pattern) that is burned into the skin with the intention that the resulting scar is permanent. Pierced participants were more likely to have a tattoo (OR, 4.13; 95% CI, 1.10-15.56; P=.04). Of the 13 participants with a piercing

Table 1
Characteristics of Survey Participants (N=100)*

Characteristic	Total	Pierced (n=56)	Nonpierced (n=44)
■ **Age, y**			
□ 17-20	54	28 (50)	26 (59)
□ 21-25	46	28 (50)	18 (41)
■ **Sex**			
□ Women	62	39 (70)	23 (52)
□ Men	38	17 (30)	21 (48)
■ **Race/Ethnicity**			
□ White	85	47 (84)	38 (86)
□ Black	9	6 (11)	3 (7)
□ Asian	3	1 (2)	2 (5)
□ Hispanic	2	1 (2)	1 (2)
□ Other	1	1 (2)	0 (0)
■ **Sexual Orientation**			
□ Heterosexual	92	52 (93)	40 (91)
□ Bisexual	5	3 (5)	2 (5)
□ Homosexual	3	1 (2)	2 (5)
■ **Other Body Modifications**			
□ Tattoo	16	13 (23)	3 (7)
□ Branding	1	1 (2)	0 (0)

* Data are given as No. (%) of participants by body piercing status (pierced vs nonpierced). Percentages do not total 100 because of rounding. No differences between pierced and nonpierced participants were statistically significant at $P<.01$.

and a tattoo, 9 reported getting the piercing first. Twenty-seven percent of pierced participants reported that they were no longer wearing jewelry on their pierced sites. There were not enough instances of body piercing in different anatomic sites to allow analysis that would determine if certain sites were more prone to discontinued jewelry use.

Participants endorsed a variety of reasons why young people (including themselves) might obtain a body piercing. The reasons listed in our survey were derived, in part, from Armstrong's[5] 1996 study (*Table 2*). Self-reported (pierced participants) and perceived (unpierced participants) motivations for obtaining a body piercing services were evaluated separately from participants' more general impressions about the social acceptability and overall attractiveness of body piercing. Pierced participants were more likely than nonpierced participants to endorse liking the way a piercing looks as a reason to get one (OR, 24.65; 99% CI, 3.30-184.20). There were no other statistically significant differences in motivation for body piercing based on age or sex.

Young adults endorsed friends (82%), professional body piercing shops (61%), and tattoo shops (51%) as their top sources of information about body piercing. Healthcare professionals were identified as a common resource for information on body piercing by only 14% of participants. Pierced participants were more likely than nonpierced participants to seek information from tattoo shops (32% vs 9%, OR, 4.74; 99% CI, 1.02-22.07), professional body piercing shops (63% vs 23%, OR, 6.05; 99% CI, 1.58-23.21), and the Internet (29% vs 5%, OR, 8.40; 99% CI, 1.12-62.94). Women were more likely than men to report getting information about body piercing from professional body piercing shops (65% vs 13%, OR, 12.67; 99% CI, 2.78-57.78).

Among the 56 pierced participants, the most commonly pierced anatomic sites were ear cartilage (both sexes) (34%), navel (34%), tongue (23%), and earlobe (men only) (65%). Fewer participants reported body piercing in other anatomic sites including: nipple (13%), eyebrow (9%), nose (7%), cheek (4%), female genitalia (2%), and lips (2%). No participants reported a piercing of the chin or male genitalia. The anatomic sites most commonly chosen for participants' first body piercing were the ear cartilage (both sexes) (21%), earlobe (men only) (47%), navel (20%), tongue (9%), nipple (7%), cheek (4%), nose (2%), and eyebrow (2%).

Pierced participants also reported that their piercing modifications were performed in professional body piercing shops (34 [62%]), piercing shops in malls (16 [29%]), by themselves (2 [4%]), or by friends (1 [2%]). There were no statistically significant differences based on age, sex, or race/ethnicity. Regardless of piercing status, participants' accurately perceived the places where body piercing services were most commonly obtained (*Table 3*). There were no statistically significant differences between pierced and nonpierced participants with regard to perceptions on common sources for obtaining piercing services.

Of pierced participants, nearly two thirds (33 [59%]) reported that all or most of their family "approved" of their body piercing; 17 (30%) said that none, few, or some of their family approved; and 2 (4%) said they did not know if their family approved. The majority of pierced participants (43 [77%]) reported that their parents knew about their body piercing. Only 5 (9%) pierced participants reported that no one knew about their body art. Fewer than one quarter of pierced participants reported that another family member also had a body piercing.

Forty-three percent of all participants reported knowing someone who had health problems related to body piercing. Regardless of piercing status, the most commonly reported complications that participants were aware of within their

Table 2
Self-Reported and Perceived Motivations for Body Piercing Among College Students (N=100)*

Reason	Total		Pierced (n=56)		Nonpierced (n=44)	
	Self	Others	Self	Others	Self	Others
Like the way it looks†	77	84	54 (96)	48 (86)	23 (52)	36 (82)
To be fashionable	23	68	15 (27)	44 (79)	8 (18)	24 (55)
To catch attention	18	84	10 (18)	50 (89)	8 (18)	34 (77)
To feel different	10	58	8 (14)	34 (61)	2 (5)	24 (55)
To make a personal statement	22	60	16 (29)	36 (64)	6 (14)	24 (55)
To be daring	14	45	8 (14)	30 (54)	6 (14)	15 (34)
To fit in	3	44	1 (2)	27 (46)	2 (5)	17 (39)
Parent(s) *don't* want them to have one	4	44	2 (4)	30 (54)	2 (5)	14 (32)
Friend(s) want them to have one	4	36	2 (4)	22 (39)	2 (5)	14 (32)
Parent(s) want them to have one	0	7	0 (0)	3 (5)	0 (0)	4 (9)
For religious reasons	2	11	2 (4)	5 (9)	0 (0)	6 (14)
Other reasons	3	2	2 (4)	1 (2)	1 (2)	1 (2)

* Data are given as No. (%) of participants by body piercing status (pierced vs nonpierced) as appropriate. Because multiple responses are possible, percentages may exceed 100.
† "Liking the way it looks" was the only reason with a statistically significant difference (P=.01) between pierced and nonpierced participants (OR, 24.65; 99% CI, 3.30-184.20).

acquaintance were: infection (35%), allergic reaction (17%), bleeding (12%), keloid (8%), and bruising (5%). There were no statistically significant differences in reported health problems based on age, sex, or race/ethnicity.

All participants overestimated the health risks associated with body piercing (*Table 4*). However, pierced participants estimated these risks as less likely to occur, estimating an average probability of adverse events at 30% compared to the 43% estimated by nonpierced participants ($F_{1,83}$ 14.06, P<.001). Among the 56 pierced participants, 10 (19%) reported having personally experienced at least one health problem related to body piercing. Four pierced participants did not respond to this survey item. They reported infection (7 [14%]), allergic reaction (3 [6%]), keloid (3 [6%]), and bleeding (1 [2%]) as adverse effects. Six of the 7 pierced participants who reported infection as an adverse effect of body piercing obtained piercing services from a body piercing shop. Three of these participants had multiple piercings, all of which were obtained in a body piercing shop. Body piercings were cataloged by anatomic site and were entered into our regression analysis model as variables to control for potentially different rates of infection at different piercing sites. The sample size of pierced participants who experienced complications was not large enough to determine a relationship between piercing site and possible health consequences. However, when controlling for piercing site, those participants who obtained body piercing services in a professional body piercing shop were marginally more likely (P=.074) to report having had an infection than those who obtained these services elsewhere (OR, 8.11; 95% CI, 0.82-80.65).

Comment

College-aged young adults perceive a number of different pierced anatomic sites as highly acceptable to the general public. Overall, college students reported body piercing as hypothetically less socially acceptable and attractive on themselves than on others. Most nonpierced participants reported the practice as unacceptable for themselves, but about half agreed that it would be acceptable for others. Those with body piercing largely saw the practice as acceptable for all.

College students in general have a high—and often exaggerated—awareness of the potential health risks associated with body piercing, perceiving most risks as more likely to occur than is supported by their own experiences and those of their friends. Nonpierced participants were even more likely to overestimate the associated health risks of body piercing. This overestimation of potential consequences is consistent with adolescents' typical overestimation of risks in general, especially those risks linked to behaviors with which they have no experience.[34]

There are some important limitations to the present study. The data were based on a convenience sample and were limited to young adults who entered a university student health service. Our results may not be applicable to young adults who are not in school or who are not using a campus healthcare service. Our study findings may not be generalizable—

Table 3
Most Common Sources of Body Piercing Services: Perceived vs Actual Piercers (N=100)*

Piercer	Perceived (N=100)†	Actual (n=55)‡
Body piercing shop	96	34 (62)
Shop in mall	45	16 (29)
Self	21	2 (4)
Friend	17	1 (2)
Hospital or medical clinic	4	0 (0)
Parent	3	0 (0)
Other	2	2 (4)

* Data are given as No. (%) of participants as appropriate. Percentages do not total 100 because of rounding.
† Because multiple responses were possible for this survey question, the number of responses exceeds the sample size of 100.
‡ One participant did not respond to this survey item.

especially to specialized populations such as gay, lesbian, bisexual, transgender, and "questioning" youth—because of the small number of such individuals participating in the current study. Similarly, our sample population was not diverse enough to capture potential racial or ethnic differences in piercing practices. Information about body piercing was based on self-report rather than on objective measurements such as diagnoses documented in patient medical records. Further, given the lack of longitudinal or causal data, it is unclear from the results of our study whether obtaining a piercing changed participants' attitudes or affected their knowledge. That is, pierced participants' attitudes toward and knowledge about body piercing may reflect the attitudes and knowledge they had prior to obtaining a piercing, or the attitudes and knowledge they gained after obtaining the piercing. We were not able to accurately determine whether the reported attitudes contributed to obtaining the piercing, or resulted from after the piercing was obtained.

Conclusion

Family physicians continually face challenges in providing up-to-date guidance for their patients. The fact that over half of our participants reported at least one body piercing—and mounting evidence that this behavior is associated with increased health risks as well as other potentially risky behaviors—indicates that this form of body art should be included as a routine topic addressed by family physicians at annual physical examinations for adolescents and young adults.

Although adolescents and young adults already perceive the risks of body piercing as quite high, they may not be fully aware of the effect of their choices when pursuing this form of self-expression, specifically in their selection of (1) certain anatomic sites instead of others for body piercing, (2) practitioners from whom they obtain these services, and (3) the "gold standards" for at-home aftercare. Each choice, when carefully made, may help lower their risk of experiencing the most commonly documented adverse effects of body piercing. More accurate information (*Figure*) can be provided to young adults than they often receive from friends and professional body artists. Physicians who provide primary care at routine and precollege physical examinations are ideally situated to provide patient education to this population—as are administrators at college and university campus-orientation meetings, health fairs, and in other health services venues (eg, waiting areas, examination rooms).

(continued)

Table 4
Commonly Perceived Health Risks vs Reported Adverse Events Associated With Body Piercing (N=100)

Adverse Event	Perceived Health Risk (N=100)*	Adverse Events Reported, No. (%)†	
		Self (n=52)	Others (N=100)
Bleeding	60 (2.9)	1 (2)	12
Infection	56 (2.6)	7 (14)	35
Keloid	43 (2.7)	3 (6)	8
Bruising	41 (2.5)	0 (0)	5
Allergic reaction	38 (2.5)	3 (6)	17
Cyst	24 (2.4)	0 (0)	2
Tetanus	24 (2.6)	0 (0)	0
Hepatitis B	20 (2.3)	0 (0)	0
Human immunodeficiency virus	16 (2.2)	0 (0)	1
Other	36 (7.8)	1 (2)	0
Total	NA	10 (19)	43
None	NA	41 (73)	…

* Because multiple responses were possible for this survey question, the number of responses exceeds the sample size of 100. Data on perceived health risks are given as mean percentage (standard error). Also, the number of responses received for Other adverse events (n=36) exceeded the number of affirmative participant responses (n=25) because blanks were provided where multiple perceived negative effects and adverse outcomes could be noted by survey respondents.
† Data on actual negative effects and adverse outcomes are given as No. (%) as appropriate. Data for pierced participants (n=56) reflect self-reported incidence rates among the 52 participants who responded to this survey item. However, all participants regardless of piercing status (N=100) were asked to report all incidents of negative effects and adverse outcomes known to them among their friends and acquaintances.

Abbreviations: Ellipses (…) indicate an unknown value; NA, not applicable.

- American Academy of Family Physicians http://www.aafp.org/afp/20051115/2035ph.html
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Figure. *Recommended resources for information on body piercing.*

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