A Cross-Sectional Study of Men with Genital Piercings

LaMicha Hogan, Katherine Rinard, Cathy Young, Alden E. Roberts, Myrna L. Armstrong and Thomas Nelius

Abstract

Purpose: More men with genital piercings (GP) are presenting to health care facilities, yet a paucity of medical literature exists about their body modifications, health issues, and medical needs. Historically, they have turned to a piercer or the internet for medical advice which may put their health at risk by receiving inappropriate guidance or delayed treatment by an experienced, well-informed clinician.

Methods: A comparative, descriptive cross-sectional study was conducted using an 83 item web-based survey. Demographics, risk behaviours, procedural motives, and post-piercing experiences about men with GP were examined, as well as depression, abuse, self-esteem, and need for uniqueness. Similarly published studies were also compared.

Results: 445 men from 42 states and 26 international sites reported 656 genital piercings. The average participant was 36 years of age, Caucasian, possessing some college education, married or in a monogamous, heterosexual relationships, and in excellent health. Deliberate decision-making was present: 36% chose a Frenum/Frenum Ladder GP and 56% chose a Prince Albert GP, with 25% experiencing urinary flow changes. Outcomes were related to their motives: sexual expression, uniqueness, and aesthetics, with improvement of personal and partner's sexual pleasure.

Conclusions: Several unsubstantiated assumptions about men with GP were challenged regarding the amount of STDs, GP complications, and overall demographics. Currently their GP care information is still obtained from a piercer or the internet. Clinician awareness of GP is important to educate and inform adequately, give professional advice, and provide a realistic picture of structural complications.

Keywords

male genital piercings, need for uniqueness, self-esteem, depression

Abbreviations

STD= sexually transmitted disease; GP = genital piercings

Introduction

Humans have always been interested in altering their body. Whether through piercings or tattoos, for aesthetics, religious reasons, or self-expression, the practice of body modification is a well known art.¹ One not as familiar or easily observed body modification type is genital piercings. Genital piercings (GP) are defined as developing a tract under the skin with a large bore needle to create an opening into the anatomical region for decorative ornaments such as jewelry.²⁻³ Historically, GPs are not a new procedure.

Currently, this once taboo practice is on the rise and more men with GP are presenting with a variety of medical needs to clinics and hospitals.³ From the rare Pubic Piercing (a piercing through the dorsal base of the penis) to the Guiche (a piercing through the perineum), the male genitalia provides ample area to pierce. Men commonly choose from nine different types of GP and often use three major types of piercing jewellery (Figure 1).³⁻⁶

This rapid growth trend is creating its own set of complications and questions among clinicians. The medical literature suggests the most common risks are infection and bleeding, but there are other structural considerations as well.^{3-4, 6-8} An example of this is with the most widely known and commonly encountered male GP, the Prince Albert; the jewellery pierces the urethral

meatus, exiting through the ventral surface of the penis. The piercing effectively creates a fistula for urine to drain, and many men report experiencing the need to sit down during urination due to the change in stream and difficulty in aiming.^{3,4} Other reported single case histories of more severe complications are Fournier's gangrene, urethral tears, priapism, post-coital bleeding or lost jewellery in female partners, paraphimosis, and recurrent sexually transmitted diseases.⁸⁻²⁰

Given the variety of negative issues that could arise from GP, any subject related to the health and well being of men having an intimate piercing should be directed to a well informed clinician. Currently, when questions or problems arise, men are more likely to seek assistance from the internet or a piercer rather than a health care provider.^{3,21-22} Considering the limited medical literature, as well as the minimal availability of clinicians knowledgeable about body piercings and modifications, men with GP are at high risk for delays in appropriate treatment of complications related to piercings as well as for overall preventive healthcare. Over concentration on the presence of GP by clinicians could delay important health care.²³

Our purpose for this study was to elucidate information about men with GP in order to aid the clinician in providing relevant information for patients considering GP, as well as to provide further scientific evidence by examining their demographics, risk behaviours, procedural motives and post-piercing experiences.

Figure 1 Common Types of Genital Piercings (GP) Worn by Men

Figure	Description4,39-41
	Ampallang ("crossbar") & Apadravya: Neither are common. Ampallang is placed horizontally, through the center of the head of the penis. The Apadravya is placed vertically, through the penis shaft, behind the head, between the frenulum to the top of the glans and traversing the urethra. Can produce heavy bleeding following procedure. Healing time 2-8 months. Dydoe: Involves single or multiple rings through both sides of the glans rim on
(8)	circumcised men. Origin might be Jewish. Healing time 2-4 months.
	Foreskin: A piercing, usually done on both sides of the foreskin of uncircumcised men and closed with rings, deliberately making intercourse difficult. Healing time 1-2 months.
MARKER BONY WELL	Frenum or Frenum Ladder: Easy to perform and not as painful. This is a frenulum piercing, or a large ring can be placed around the head of the penis in the groove around the glans. The Frenum Ladder is a variation where multiple barbell piercings are placed down the midline of the penis. Also called Jacob's Ladder. Healing time 2-3 months.
	Guiche: Done between the scrotum and anus, behind the testes, usually corresponds above the inseam of pants. Healing time 3-4 months
	Hafda & Pubic Piercing: Pubic is a dorsal based piercing that does not pierce the penis, sometimes nicknamed "Rhinoceros Horn", whereas the Hafada does not penetrate the scrotal sac, not considered painful and is more a decoration. Actual piercing is placed somewhere the scrotum and penis. Healing time 2-4 months.
	Prince Albert: Most common male GP, jewellery is inserted through the external urethra and out the base of the frenulum. Easy to pierce and heal. Healing time is 1-2 months. Is said to "offer intense urethral stimulation during intercourse." Reverse Prince Albert exits the dorsum of the penis.
Captive Boad Barbell Curved Barbell	Three major types of piercing jewellery for GP. Placement dictates the gauge of the jewellery.

Illustrations by Larry Starr, Senior Design Specialist Texas Tech University Health Sciences Center. Text modified with permission: Urologic Nursing 2006, 26(3), 175-176.

Additionally, several motives or characteristics of those with body art such as depression, abuse, self-esteem, and need for uniqueness were examined.²⁴⁻²⁹ Authors of this study have experience in urology, various aspects of piercing, and two decades of published body art research.

Problems in attempting any study about those with GP is reaching a sizeable sample for a study and an acceptable data collection methodology as those with GP have a hidden variable of study, making it difficult to make contact. Networking or "snowball" sampling for data collection, as well as anonymous questionnaires, becomes one approach,³⁰ but this also makes it difficult to validate if respondents actually have GP. In an effort to address this issue, survey questions were specifically written for individuals with GP, making it extremely difficult and time-consuming to answer if the respondents did not have applicable experiences. Previous research experience also indicates that after about 10-15 questions, interest can wane and the questionnaire will not be completed.^{3,7,31}

Only two published studies could be located to provide preliminary information about individuals with GP.21,22 In the first study²¹ data, collected in 2000 and actually published in 2005 had a national convenience sample of 63 women and 83 men with nipple and/or GP. Forty-eight men in the study had GP; the average man was 31 years of age, single, heterosexual, Caucasian, in good-excellent health, who sought out annual physicals, possessed some college education, and spoke of moderately strong religious faith. Almost all were employed, reporting an average annual salary of \$36,000, or higher. Over half admitted and continued their belief they were risk takers; many of them also had 3 or more general body piercings. Most did not smoke or use drugs routinely and in this study, no questions about alcohol use were asked. Their average age at first sexual intercourse was 15.7 (the national male average is 16.9).³² Of those that participated (37%) in sport activities or exercise, they reported with no problems. They voiced minimal, if any, regrets to obtaining a genital piercing and would repeat the procedure. The Prince Albert was the most common male GP. Few (12%) voiced any problems with their GP, with urinary flow changes and site hypersensitivity being the most frequently mentioned. Six participants stated partners had refused sexual intercourse with them after their GP. One case of STD (Gonorrhoea) was reported post-procedurally.

In 2008, data were collected for a second study involving women with GP.²² This time the collection methodology took advantage of young adults highly routine usage of the worldwide internet and combined this with a successful, accessible networking sampling software entitled SurveyMonkey© (Portland, OR). The average woman with GP participant in the 2008 study (N = 240) was 32 years of age, Caucasian, heterosexual, married, in excellent health, who sought out annual physicals, participated in athletic activities, had an Undergraduate or Graduate Degree, reported few other friends with GP, and had 3 or more general body piercings. Their

average age at first sexual intercourse was 15.9 (the national female average is 17.4).32 Many of the women reported themselves as risk takers and most believed they continue to have those ideas. Most did not smoke or use drugs routinely and their alcohol intake was infrequent, but when they consumed alcohol, they reported consuming 5+ consecutive drinks. They voiced minimal, if any, regrets to obtaining a genital piercing and reported that they would repeat the procedure. Only a few cited any problems, with site sensitivity as the most frequently mentioned health problem. bleeding, rips, tears, or STDs were reported following their GP and no one had refused sexual intercourse with them. Additionally, an adjoining survey of 60 health care providers (physicians, registered nurses, midwives) who had previously cared for women with GP were queried; their viewpoints regarding women with GP and STDs, GP complications, and general concerns produced no major deviations of data from what was previously described.²²

METHODS

Design

As the internet survey demonstrated marked success in reaching those with GP, a similar study was undertaken to query a larger cohort of men with GP to increase clinician awareness in caring for men with GP. Thus, a cross-sectional descriptive study of men with GP was conducted so the collected information could be compared with the previously mentioned studies of those with GP.^{21,22} To ensure that the rights and dignity of all research participants were protected, exempt study status was obtained for this study from the university institutional review board. Notices of the study and a request for participation were posted on a number of popular body piercing sites with the assistance of an internationally-known Expert Piercer. The survey was available on the web for a total of 6 months during late 2008 and early 2009.

Questionnaire

Questionnaire items were based on a review of literature, the Armstrong Team Piercing Attitude Survey,31 previous work examining women with GP, 3,21-22, 33 and recent findings about those with body art. 24-29 The study purpose and benefits were presented on the front page of the survey. The subjects were informed that completion of the survey indicated their consent to participate in the study and that they could stop at any point during the survey if they were uncomfortable with a question (s). Ethnicity was included to note GP acquisition patterns; the ethnic categories were not defined and participants selfreported. Assurances were provided that the information would be analyzed as group data and no identifying information would be sought. Respondents were encouraged to answer questions honestly and not to be offended by any questions as some of them directly related to unsubstantiated assumptions written about GP in the medical literature. 21-22 There was no

ability to tabulate how many individuals viewed the survey if they did not start the survey.

The survey had 4 sections: (a) Obtaining the GP (13 questions); (b) Personal experiences with the GP (32 questions); (c) General information including depression and abuse (26 questions), and (d) Sexual behaviour including forced sexual activity (12 questions). Four scales were also included: motives (14), outcomes (16), pre and post procedural self-esteem (16), and need for uniqueness (4). The previous reliabilities for the motive scale was 0.75,²² outcome scale 0.88,²² and need for uniqueness scale was 0.80;²⁵ data was not available for the self-esteem scale.³⁴ Various response formats were used throughout the survey such as a 5 point Likert scale (1 = strongly disagree or unlikely to 5 = strongly agree or likely), multiple choice, and short answers.

Data Analysis

The Statistical Package for the Social Sciences (16.0 Ed.) was used for data analysis to obtain frequencies, cross-tabulation, and chi-square analysis.³⁰ Additionally, T-tests were used to compare means of similar questions from both the 2005 and 2008 studies with data from the current study. Significant differences were found in both study samples so they were judged as different groups from this current study.

RESULTS

Study Population

While 545 respondents started the survey, responses were analyzed from 445 men with GP (82%) residing in 42 states and 26 international countries; they declared a total of 656 piercings. Clusters of participants were evident from CA (22), NY (17), TX (16), FL (11), Europe (43), Canada (21), and Australia (20). Ages of the men with GP at survey time ranged from 15 to 72 (Table 1). The average participant in this study was 36 years of age, Caucasian, some college education, married, in excellent health, who sought out annual physicals, reported no/few friends with GPs, and declared a salary of \$45,000 or higher. Religious beliefs were grouped into either non-existent or moderately to very strong faith. There was almost equal numbers of blue collar and white collar workers: others were from health care, arts, academia or military, while some were self-employed; very few mentioned unemployment, or retirement.

Risk Behaviours

Those who reported pre-procedural risk taking tendencies continued to have significant tendencies for them post-procedurally ($\chi^2 = 2.13$) = 16; p = 0.000) (Table 2). Some risky behavior was observed; over half had body art, with an average of 2 piercings or more, as well as tattoos. Alcohol use was infrequent, but when they did, they had 5+ drinks. Other answers did not bear out the risk taker image with their

monogamous, heterosexual relationships, limited tobacco, and drugs. Their average age at first intercourse was 17.05 (national male average 16.9).³² Most (391/88%) did not report STDs before their piercings, but of those that did itemize their STDs, Chlamydia was the most frequently mentioned (n =18).

Table 1 Self-Reported Characteristics Of Men with Genital Piercings (GPs)

Demographics	Current Study*	
	N = 445	
Age at time of survey		
20 or <	61/29%	
21-35	77/36%	
36-50	41/19%	
51+	33/16%	
Ethnicity		
Caucasian	319/89%	
Martial Status		
Single	96/27%	
Living/significant other	69/20	
Married with/out children	143/41%	
Education		
High school Diploma	34/10%	
Some college	113/32%	
Bachelor's degree	77/22%	
Graduate/Doctoral degree	88/20%	
Occupations		
Technical/vocational	90/28%	
Professional	92/29%	
Students	44/14%	
Artists	23/07%	
Salary		
<45,000	135/44%	
\$45,000+	169/56%	
Strength/Religious Faith		
Non-existent	135/39%	
Mod Strong-Strong	99/28%	
State of Health		
Excellent	310/88%	
Health care visits		
Annual physicals	150/43%	
Only when problems	142/40%	
Close friends w/GPs		
None	239/68%	
1-3	100/28%	
4+	14/ 4%	
Feel sad/depressed		
Little/Some		
Pre-piercing	248/57%	
Post-piercing	210/59%	

^{*}Numbers will not always add up to 100 because of missing data or multiple answers.

Genital Piercing Procedure

A deliberate time delay between their consideration to making the decision to have a GP was present as many had waited almost 5 years before procurement (Table 3). Over half reported the Prince Albert GP, with another third choosing a Frenum/Frenum Ladder (Figure 1). While a small-moderate amount of pain and bleeding was reported procedurally, virtually no drugs or alcohol were used before their GP.

Table 2 Self-Reported Risk Behavior From Men with Genital Piercings (GPs)

Risk Behaviour	Current Study*	
	N = 445	
Age at first intercourse		
Never had intercourse	12/03%	
12 or less	14/04%	
13-15	80/25% 160/48%	
16-18		
19+	74 /23%	
Sexual Orientation		
Women	286/82%	
Risk Taker Before Piercing	222/52%	
Remains Risk Taker	198/52%	
Cigarettes Smoked		
None	252/75%	
½-1 pack daily	75/22%	
Monthly Alcohol Consumption		
1-3 times	118/33%	
5+ drinks @ one setting, 1-3x	191/55%	
Drugs Used monthly		
None	294/87%	
1-15 times	27/08%	
Sexual Partners in 6 months		
One	211/62%	
Two or more	98/32%	
General body piercings		
None	119/27%	
1-4 piercings	259/59%	
5+ piercings	108/33%	
Tattoos		
None	115/35%	
1-4	134/38%	
5+	76/21%	
STDs before piercing	54/12%	

STDs before piercing 54/12%
*Numbers will not always add up to 100 because of missing data or multiple answers.

Table 3 Self-Reported Procedural Information From Men with Genital Piercings (GPs)

Genital Piercing procedure	Current Study*	
	N = 445	
Amt of decision time		
Waited long time, then a few minutes	49/24%	
A long time (over a year)	143/37%	
Age of GP Decisions		
Consideration	29 years	
Procurement	34 years	
Type of Genital Piercings		
Ampallang	35 08%	
Apadavya	46/10%	
Dydoe	27/06%	
Foreskin	27/06%	
Frenum/Frenum ladder	160/36%	
Guiche	32/07%	
Hafada	43/10%	
Prince Albert	248/56%	
Other	38/09%	
No Drug/alcohol at piercing	364/94%	
Small-mod amt of pain	292/75%	
Small-mod amt of bleeding	274/71%	

^{*}Numbers will not always add up to 100 because of missing data or multiple answers.

Table 4 A Three Study Comparison Of Self-Reported Motives and Outcomes From Those Wearing Genital Piercings.

Variable	Caliendo et al, 2005 Study:	Young, et al, 2010 Study	Current Study
	Data Collected 2000	Data collected 2008	Data collected 2009
	Men with GPs N = 48*	Women with GPs N = 240*	Men with GPs N = 445*
Motives for their genital	34/71% "Just wanted one"	163/70% "Just wanted one"	196/90% "Just wanted one"
piercing	24/50% "Trying to feel sexier"	120/51% "Trying to feel sexier"	73/60% "For the heck of it"
	23/45% "For the heck of it"	111/48% "More control over my	67/60% "Trying to feel sexier"
		body"	
	18/38% "Wanted to be different"	93/40% "Seeking uniqueness"	56/58% "More control over body"
	18/38% "Make myself more	91/39% "Make myself more	51/56% "Seeking uniqueness"
	attractive"	attractive"	
	(alpha 0.40)	(alpha 0.75)	(alpha unobtainable)
Outcomes of their genital	36/77% "Improved my sexual	176/76% "Helped express myself	278/81% "Improved my sexual
piercing	pleasure"	sexually	pleasure
	35/73% "Helped express myself	173/75% "Improved my sexual	234/71% "Helped express myself
	sexually"	pleasure	sexually"
	35/73% "Helped me feel unique"	157/68% "Helped me express	218/67% "Helped me feel unique"
		myself	
	29/62% "Improved partner's sexual	134/58% "Helped me feel	229/67% "Improved partners sexual
	pleasure"	feminine"	pleasure
	27/56% "Helped express myself"	134/58% "Helped me feel unique"	211/64% "Helped genital look better"
	(alpha 0.89)	(alpha 0.88)	(alpha 0.88)

^{*}Numbers will not always add up to 100 because of missing data or multiple answers

Motives and Outcomes

Table 4 illustrates participant motives and outcomes for each group in the various GP studies. 21,222 For the highest motive response of "just wanted one" there was consistency over the three studies; of the top five responses, they were similar but just ranked differently. Alpha measurements for the motive response scale ranged from 0.40 to 0.75 except for our current study, where the covariance matrix was zero or approximately zero so the statistics based on its inverse matrix could not be computed. Motives centered around wanting a GP, trying something new, have more functional sexual control, and seeking uniqueness. Measureable outcomes (Alpha range 0.88-0.89) of their GP evolved around their sexual expression, uniqueness, and aesthetics, as well as the improvement of their personal and partner's sexual pleasure. In review, their motives for the GP were met in their stated outcomes.

Post-piercing Experiences

The men reported continued satisfaction with their GP and would repeat the procedure. While not many were engaged in exercise/sport activities, those that did, were active (Table 5). A few reported partner refusal of sexual activities when their GP was in place. Almost half reported no piercing complications; of those that did, only 2 major problems were cited. First, with over half reporting Prince Albert piercings, it was not surprising that 25% discussed changes in their urinary flow. Site hypersensitivity was the second most reported problem (23%), otherwise there were no further trends of other severe complications. While 80 (18%) reported STDs after their GP, only 19 itemized the specific type: the most responses were Chlamydia (9). Those that had a history of STDs (Table 2 & 5) before their piercings were significantly more likely to have them post-procedurally ($\chi^2 = 11.5$) = 1; p = 0.001).

Table 5 Self-Reported Post Procedural Information From Men with Genital Piercings (GPs)

Post Procedural Experiences	Current Study*
	N = 445
Have had partners refuse sex	38/10%
**Reported STDs since piercing	80/18%
Still like genital piercing	334/87%
Would do it again	358/93%
Sports/exercise involvement	
None	366/82%
Jog/ride bike/exercise, etc	79/18%
Complications from piercing	
No problems	209/47%
Change in urinary flow	109/25%
Site hypersensitivity	101/23%
Skin irritation	30/07%
Rips/tears at site	30/07%
Problems using condoms	24/05%
Keloids @ site	16/04%
Site infection	11/03%
Urinary tract infection	7/02%
Site hyposensitivity	70/2%
Sexual problems	401%
Jewellery embedded	4/01%
Erection problems	4/01%
Other, not named	18/04%

^{*}Numbers will not always add up to 100 because of missing data or multiple answers.

Depression, Abuse, Self-Esteem, and Need for Uniqueness

Four additional characteristics about individuals with GP were examined. When with GP respondents reported a small amount of "sad or depressed feelings"; those that had these depressed feelings before their piercings were significantly more likely to continue these depressed feelings post-procedurally ($\chi^2 = 4.1$), = 16; p = 0.00). Only 5 (1%) reported being forced to

participate in sexual activity against their will, while a few cited (56/12%) physical, emotional, or sexual abuse.

To extract a profile of self-esteem, 8 questions were asked in the pre and post piercing survey sections; internal consistency (Cronbach alpha) of both scales was 0.75. Their responses to both the pre procedure (M = 22.3, SD = 4.51) and the post piercing time (M = 23.1, SD = 3.97) was highly correlated at 0.79 (P < 0.01). Two statements triggered split, negative and positive responses with "I make demands on myself that I would make on others" and "I blame myself when things do not work the way I expected." Lastly, their Need for Uniqueness (NU) was asked using a four item scale^{24,25} in the pre-piercing survey section. When all five responses of the scale were totaled (20), the mean was 11.3 documenting a more positive perspective about their GP, close to the moderate level (Cronbach alpha 0.86), for intentionally wanting to be different, distinctive, and unique. When asked if their overall feelings of NU had changed since obtaining their GPs, those that had NU before their piercings were significantly more likely to have them post-procedurally ($\chi^2 = 11.5$) = 16; p =0.03).

DISCUSSION

When examining this data from men with GP alongside the 2005 published study,²¹ the cohort almost equalled 500 participants. To our knowledge this is the largest repository of data currently available to provide further evidence of the demographics and health issues regarding men with GP. The anonymous data, obtained by networking sampling and accessible, economical web-based survey, could be viewed as a study limitation. Yet, finding similarities between this data and data collected almost ten years ago suggests that our findings tapped into a core body of knowledge about men with GP. Similar data, obtained at different times, from different respondents increases the credibility and lends the information to further generalizability to influence use in practice.³⁰

The "social reality" 2 of the GP phenomenon is here. All of the men had one type of GP, and some had multiple GP, and many had other general body piercings.³⁵ Awareness of the current types of body modification including GP will help the clinician educate and inform adequately, to give professional advice, and also provide a realistic picture of structural considerations. Respondents stated their GP were an important and satisfying part of their life, they still liked them, and would repeat the procedure; the GP improved their sexual activities, few refused sexual intercourse, those that exercised were active, and they were not troubled by the GP complications. From a medical standpoint the insertion of a GP could be considered a minor surgical procedure, and yet the data suggests that when the GP is performed by experienced hands only minimal side effects are reported. Thus, finding a knowledgeable, expert piercer is an important educational theme. However, patients need to also be aware that certain types of piercing may require some behavioral changes such as toileting and consistent body cleaning.

Unfortunately virtually no health care providers, including clinicians, were mentioned in the GP decision making process or care, they usually went to the internet or returned to a piercer for information.^{21,22} Hopefully, as more clinicians are made aware of GPs, those who are considering GP will find their physician to be a helpful and more informative resource.

These study participants with GP were older, well-educated men, often in a stable relationship, different than what is usually thought about people with body piercings.7, 22,26-27,29,31 This scientific evidence about their overall demographics pose challenges to the current medical literature. demographics from this study and the other two cited GP studies 21,22 do not reflect individuals from stereotypical low social and economical backgrounds. performing Demographically, the people with GP were in their early thirties, Caucasian, heterosexual, well educated, employed, in good health, with some religious beliefs, but not ethnically diverse. In contrast to literature describing men with GP as antisocial miscreants or mostly homosexual, 2,4,18 our data support that these men are more part of the mainstream culture. The avoidance of "rushing to judgment"28 is an important aspect, especially in the way they are often perceived.

Men with GP did not deny their propensity to be risk takers, but being a risk taker was not synonymous with being deviant, but more with achieving individualization. 21,28,31 Threads about stable relationships were provided throughout their information, including sexual orientation, marital status, GP complications, and even their lack of many risk behaviours. Their first time for sexual intercourse was close to the male national average. While procurement of any type of body art is thought to be impulsive 7,21-23, their time for GP decisionmaking was deliberate, as well as their practice of on-going, conscientious care of their piercings.^{21,22} Absence of alcohol and/or drug consumption before the GP procedure has been a frequent finding in other body art studies.^{7,21-22,31} Reputable piercing artists advocate for no use of alcohol and drugs as they want their customers to be making realistic procedural decisions about their GP and listening carefully to post GP care instructions.

The unsubstantiated assumptions in the literature about GP complications such as male infertility, scrotal infections, reduction of erotic stimulation, and frequent infections with bicycle rides were also challenged. 6,21,36-40 Overall, only two problems of urinary flow changes and site hypersensitivity were reported with their GP. They took their sexual concerns seriously, as part of their internal influences of self esteem and their need for uniqueness. Their documented motives reflected sexual enhancement, aesthetics, as well as uniqueness. Their stated outcomes of the GPs reflected an ability to better express themselves sexually and create a sense of uniqueness; these elements obviously took precedence over the two problems of urinary flow changes and hypersensitivity. Both these motives and outcomes were similar when compared with the other two

studies.^{21,22} Further procedural research is suggested to obtain more information about the reasons some with Prince Albert GP have urinary flow changes, while others do not, to eliminate this as a possible side-effect.

Negative bias continues with the assumption that individuals with GP frequently have STDs. 18-20, 36-40 Historically, concern for those who have "exotic adornments" such as body piercings have led some health facilities to require STD screening, no matter what the nature of the presenting complaint.^{22,35} Yet, in this study and the other two related GP studies, 21,22 respondents reported only a few STDs. Their reporting incidence of STD was low compared to the national Guttmacher Institute report of one in three sexually active people will have contracted a STD by age 24.32 As in this study, Chlamydia remains the most highly reported STD in the US.32 While it is important to always conduct a thorough sexual history, 20 perhaps the conscientious care related to the deliberate decision for the GP, and the mostly monogamous relationships reported may account for the limited reporting of STDs. One STD clinic study found that neither socioeconomic status, method of contraception, multiple partners, or the presence of genital infections correlated with GP.38 Further longitudinal research is suggested to examine the long-term effects of GPs, as well as further GP complications and STD prevalence.19

Men, like women, with GP^{21} reported depressed feelings^{26,27,29} both pre and post procedure, but gender differences were present with abuse and forced sexual activity. The men with GP reported few incidents of abuse (emotional, physical, or sexual) or forced sexual activity against their will whereas over a third of the women with GP^{22} reported this. Although women frequently spoke of their use of GPs to take more control in reclaiming their body to "free them from the bonds of molestation and give them strong feelings of empowerment," ²² men verbalized their use of GPs to give them more sexual control.

STUDY LIMITATIONS

As with any study, several limitations to generalizability of data must be considered and one of methodology has been previously discussed. This was a non experimental, descriptive study design and the respondents self-selected to complete a web-based survey. Bias, inaccurate recall, and/or inflation can result from self-reporting.³⁰ Respondents had to use their personal judgment to interpret questions with the use of an anonymous survey so socially desirable responses could have been entered. Participants with strong negative or positive feelings may have been more likely to complete the survey. Yet, as random sampling is almost impossible in a population with hidden variables, and in spite of these limitations, the respondents did contribute further quantitative data.^{21,22}

CONCLUSIONS

The trend of those obtaining GP continues to increase and is not limited by age, gender, socio-economical backgrounds, or sexual preferences. Many in this study still reported seeking advice of a piercer or the internet. As an identified population at risk for quality health care, further evidence of demographics, piercings and jewellery, motivations, outcomes, and health issues were presented about men with GP so clinicians can provide clinically competent and applicable approaches for care. The collective data examined here, along with some collected almost ten years ago, begins to dispel some of the negative assumptions about this segment of the body modification population regarding their overall demographics, GP complications, and STD prevalence.

Acknowledgements

The authors acknowledge the support and manuscript reviews of Bernhard T. Mittemeyer, Elayne Angel, Jerome Koch, Joanna Guenther and Scott De Boer. Competing Interests

Funding in part by the Texas Tech University Anita Thigpen Perry School of Nursing Research & Practice Committee.

Author Details

LAMICHA HOGAN MSN, RN, FNP-BC Clinical Instructor/Family Nurse Practitioner, Anita Thigpen Perry School of Nursing Texas Tech University Health Sciences Center 3601 4th Street, Lubbock, TX 79430

KATHERINE RINARD MD Department of Urology, School of Medicine, Texas Tech University Health Sciences Center 2601 4th, 3B163 Lubbock, TX 79430-7

CATHY YOUNG, DNSc, APRN, BC Family Nurse Practitioner, University of Texas, Arlington Student Services, Arlington TX

ALDEN E ROBERTS Ph.D., Professor Department of Sociology, Anthropology, and Social Work Texas Tech University Lubbock, TX 79409

MYRNA L ARMSTRONG Ed.D., RN, FAAN Professor and Regional Dean, Anita Thigpen Perry School of Nursing Texas Tech University Health Sciences Center @ Highland Lakes 806 Steven Hawkins Parkway, Marble Falls, TX 78654 THOMAS NELIUS MD, Ph.D, Assistant Professor Department of Urology, School of Medicine Texas Tech University Health Sciences Center 2601 4th, 3B163 Lubbock. TX 79430

CORRESSPONDENCE: MYRNA L. ARMSTRONG Ed.D., RN, FAAN Professor and Regional Dean, Anita Thigpen Perry School of Nursing Texas Tech University Health Sciences Center, Highland Lakes, 806 Steven Hawkins Parkway, Marble Falls, TX 78654 tel. 830 798-9548; fax 830 798-8598 Cell 512 699-9150 THOMAS NELIUS MD, Ph.D, Assistant Professor Department of Urology, School of Medicine Texas Tech University Health Sciences Center 2601 4th, 3B163 Lubbock, TX 79430. Cell: 806 445-4999 fax 806 743-1335 Email: Myrna.armstrong@ttuhsc.edu, Thomas.nelius@ttuhsc.edu

REFERENCES

- Rush JA. Spiritual Tattoo: A Cultural History of Tattooing, Piercing, Scarification, Branding, and Implants, 2005. Frog Ltd: Berkeley, CA.
- Stirn A. Body piercing: Medical consequences and psychological motivations, Lancet. 2003;361 (9364):1205-1215.
- Armstrong ML, Caliendo C, Roberts AE. Genital piercings: What is known and what people with genital piercings tell us. Urol Nurs. 2006;26:173-179.
- Anderson WR, Summerton DJ, Sharma DM et al. Andrology: The urologist's guide to genital piercing. Br J Uro. 2003;91:245-251.
- Ward, Jim. "Running the Gauntlet" bmezine.com, March 15th, 2004, Toronto, Ontario, Canada.
- 6. Ferguson H, Body piercing. Br Med J. 1999;319:1627-1630.
- Armstrong ML, Koch JR, Saunders JC, et al. The hole picture: Risks, decision making, purpose, regulations, and the future of body piercing. Clin Dermatol. 2007;25:398-406.
- 8. Hall IS, Summerton DJ., Prince Albert's revenge: a cautionary tale. Br J Urol. 1997;80(6):959.
- Hansen RB, Olsen LH, Langkilde NC. Piercing of the glans penis. Scand J Urol Nephrol 1998;32:219-20.
- Ekelius, L. Fournier's Gangrene after Genital Piercing. Scand J Infect Dis 26:610-612, 2004.

- Higgins SP, Estcourt CS, Bhattacharvya MN. Urethral rupture in a homosexual male following avulsion of a "Prince Albert" penile ring. Int J STD AIDS 1995; 6: 54-55.
- Kato Y, Kaneko S, Igucki Mm Kuriti T. Strangulation of the penis by a ring. Hinyoikka Kiyo 1987; 33:1672-75.
- 13. Zermann DH, Schubert J, Strangulation of the scrotum. Scand J. Urol Nephrol 1997;31:401-12.
- Slawik S. Pearce I, Pantelides M. Body piercing: an unusual cause of priapism BJU Int 1999;84:377.
- Jones R, Kingston A, Boag F. Post-coital bleeding due to penile piercing. Int J STD AIDS 2007;18:427-428.
- Das G, Rawal N, Bolton LM. The case of the missing "Prince Albert" Obstet & Gynecol. 2005;105:1273-5.
- Jones A, Flynn RJ. An unusual (and somewhat piercing) cause of paraphimosis. Br J Urol. 1996;78: 803-4.
- Wilcox RR. Sexual behavior and sexually transmitted disease patterns in male homosexuals. Br J Van Dis 1981; 57:167-169.
- Gokhale R, Hernon M, Ghosh, A. Genital piercing and sexually transmitted infections. Sex Transm Infect 2001;77(5):393-394.
- Hounsflied V, Davies SC. Genital piercing in association with gonorrhoea, chlamydia and warts. Int J STD AIDS 2008;19:499-500.
- Caliendo C, Armstrong ML, Roberts AE. Self-reported characteristics of women and men with intimate body piercings. J Adv Nurs. 2005;49:474-484.
- Young C, Armstrong ML, Mello I, et al. A triad of evidence for care of women with genital piercings. J Am Acad NP. In press to be published february 2010.
- DeBoer D, Amundson R, Angel E. Managing body jewellery in emergency situations: Misconceptions, patient care and removal techniques. J Emerg Nurs. 2006;32:159-164.
- Tiggemann M, Golder F. Tattooing: An appearance-based expression of uniqueness. Body Image: Int J Research 2006;3(4):309-315.
- Lynn M, Synder CR. Uniqueness seeking. In C.R. Snyder & S.J. Lopez (Eds). Handbook of Positive Psychology. New York: Oxford University Press 2002;395-410.
- Carroll ST, Riffenburgh RH, Roberts TA, Myhre EB. Tattoos and body piercings as indicators of adolescent risk-taking behaviours. Pedi 2002;109:1021.

- Carroll L, Anderson, R. Body piercing, tattooing, self-esteem, and body investment adolescent girls. Adoles. 2003;37(147):627-637.
- Nathanson C, Paulhus DL, Williams KM. Personality and misconduct correlates of body modification and other cultural deviance markers. J Res Personality. 2006;40:779-802.
- Roberti JW, Storch EA. Psychosocial adjustment of college students with tattoos and piercings. J College Counseling. 2005;8:14-19.
- Burns N, Grove SK. Understanding nursing research (3rd Ed). 2003, Philadelphia: Saunders.
- Armstrong ML, Roberts AE, Owen DC, Koch JR. Toward building a composite of college student influences with body art Iss Comprehen Pedia Nurs 2004;277-295.
- Sexual and reproductive health: Women and men. 2002. Alan Guttmacher Institue. New York: AGI http://www.guttmacher.org/pubs/fb_10-02.html
- Young C, Armstrong ML What nurses need to know when caring for women with genital piercings. Nurs Women's Health 2008;12(2):130-38
- Berent Associates. Self-Esteem Profile Retrieved 7/4/2008 from http://www.social-anxiety.com/area-self-esteem.html
- Antoszewski B, Sitek A, Fijalkowska M, Kasielska A, Kruk-Jeromin J.
 Tattooing and body piercing what motivates you to do it? Int J Soc
 Psychiatry. 2009; retrieved 9/9/2009 Epub ahead of print
 at.http://www.ncbi.nlm.nih.gov/pubmed/19651696?ordinalpos=1&itool=email.emailreport
- 36. Kaatz M, Elsner P, Bauer A. Body-modifying concepts and dermatologic problems: Tattooing and piercing. 2008;26:35-44.
- 37. Fiumara NJ, Eisen R. The titivating penile ring. Sex Trans Diseas. 1983;10:43-44.
- 38. Willmott FE Body piercing: Lifestyle indicator or fashion accessory? Int J STD AIDS 2001;12:358-360.
- Peate I. Body piercings: Could you answer your patient's questions? Br J Nurs. 2000;9(20:28-36.
- Steward C. Body piercing: Seductions and medical complications of a risky practice. Med Aspects Human Sexuality. 2001;1(5): 45-50

© BJMP.org