Prevalence and implications of genital tattoos: A site not forgotten

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

Abstract

Purpose: To provide information on men who have tattooed one anatomical site, the genital region (pubic and/or glans penis), that is uncommonly noted.

Methods: Two methods were used. First, the limited cultural and medical literature was reviewed. Secondly, a subsample of 14 men were analyzed, taken from a primary study examining male genital piercings (N = 445), who responded affirmatively to one survey question about penile tattoos. Findings: The literature (n = 25) was limited. Cultural literature revealed a long, rich history of genital markings for esthetics, sexual enhancement, and tribal status, whereas the medical literature reflected limited observational type information, some actual case histories, and few studies. From the small subsample, qualitative and quantitative data were provided. Similarities to those who wore general body tattoos were validated such as being single, heterosexual, having some college/vocational education, monthly binge drinking, no skin complications, and a strong propensity for a Need for Uniqueness. Reportedly, they were major body art wearers and continue to enjoy them. First age occurrence of sexual intercourse was similar to the national average of 17 years. Challenged assumptions included (a) no consensus regarding being risk takers, (b) significant reported forced sexual activity, and no (c) physical, sexual or mental abuse.

Conclusions: From our experience, those with genital tattoos are seen primarily for a normal range of developmental and physiological urologic issues, not their decorative markings; these genital tattoos are an integral part of their cultural and personal expression and most likely will increase. Yet, the markings are only skin deep so clinicians should adopt a nonjudgmental approach and employ methods of proactive patient health education.

Keywords: Key Words: Penis, tattoos, males, genital tattoos, Need For Uniqueness

INTRODUCTION

Maintaining its longstanding presence as one of the oldest forms of art, body tattooing has increased exponentially within mainstream society, as well as in social acceptance. Generally worn to display individuality and creativity, these distinctive forms of indelible markings are present in every culture, whether on tribal men, or people of status. Procedurally when inserting the decorative markings, the approach in studio tattooing has not changed significantly as artists are still using "an electrically powered, vertically vibrating instrument to inject tattoo pigment 50 to 3,000 times per minute up to or into the dermis at a depth of $1/64^{\text{th}}$ to $1/16^{\text{th}}$ of an inch"¹

While no national registry provides prevalence, a 2012 Harris Poll cited one in five United States (U.S.) adults have at least one tattoo (21%), an increase of 16% and 14% from previous surveys taken in 2003 and 2008 respectively. Tattoo numbers were even higher in some variables including age between 30-39 years (38%), Hispanics (30%), females (23%), and those living in the Western part of the U.S. (26%). No questions were identified in the 2012 poll that queried tattooed body site locations. Other studies cite almost a 25% presence of tattoos. The amount of tattoo studios also echoes the growing body art phenomenon.

Given the societal blaze of tattooing, the medical literature on body art has also increased. Yet, most of the information still remains focused on small case reports⁶ about traditional locations (arms, legs, chest, back), their decision-making,

various risk-taking behaviors,⁸ and the small amount of complications.⁷ Those with various adverse skin reactions or major complications seem to have had tattoos with colored pigment.⁶

While body art can be found virtually everywhere on the human anatomy, several articles have surfaced concerning genital body piecing. 4-5, 9-11 Current studies validate the increasing rate of all types of tattooed 4,8 people, from a variety of occupations and social classes, with markings on visible and non-visible locations.7 This article reports on the limited medical literature found about men with genital tattoos (pubic and/or the glans penis). Also presented is a subsample data analysis of 14 men from a primary study examining male genital piercings, 11-12 who responded affirmatively to one survey question about penile tattoos. This synopsis and subsample data analysis are provided for clinicians to have further, recent evidence about men with genital tattoos for decision making during patient encounters in health care settings. The terminology of penile and genital tattoos will be used interchangeably in this article.

METHODS

Literature Synopsis

Historically, the cross-cultural literature is rich in visual genital tattoo descriptions. In South America, the Moche on the North Coast of Peru (A.D. 150-800) produced ceramics illustrating vivid sexual imagery and highly decorated male genitals.¹³ Phallus decorations with dots, concentric lines, and

other tattoo markings on the penile skin and mucosa during the Upper Paleolithic era in Europe 12,700 to 11,000 years ago have been reported. 14-15 Likewise, the Samoan Island culture, where the word "tattoo" is believed to have originated from "tatau,", has maintained ritualistic16 traditions for over two thousand years; they are initiated at the time of puberty for future leadership roles. These 10+ days of ceremonies include very painful, repeated tattooing of the scrotum (tafumiti) and the penis (tafito). Other nearby primitive Polynesian tribes have believed this tattooing as highly erotic, 16 whereas the indigenous Maori (New Zealand) trust that the pigment for these tattoos can trap cosmic energy. 14 Circumcision and tattooing were thought to produce the same effect of magic protection and healing powers after scar healing.¹⁴ In the Japanese culture, an examination of Yakuza (racketeers or gangsters) also describes the genitalia as a site that is tattooed, 17 fulfilling their principles of tattoos always being covered.

Searching for information about genital tattoos was more challenging within the medical literature. A comprehensive longitudinal 40 year search of the national and international electronic medical literature (1973-2013) published in English and their associated reference lists was conducted with MEDLINE, EMBASE, CINAHL, SCOPUS, and OVID. Only 20 articles were located that mentioned genital tattoos. Articles were from international authors (n = 11) and the U.S. (n = 9); they all produced interesting reading. One reference cited women with genital tattoos.⁷

Genital tattoos in the early literature were labeled as criminal, or personality disorders tattoos; 18 one recent article discussed them under the header of genital self-mutilation.¹⁶ Others described them as a valuable clue for forensic pathology identification. 19-²⁰ World War II articles cited descriptive stories of soldiers with penile tattoos, 21-22 with one reporting up to 10 sailors being seen.²³ Besides reporting on how the fate of Bulgaria was determined by three tattooed men (Churchill with an anchor on his left arm, Roosevelt with a family coat of arms tattoo, and Stalin with a death's head on his chest),²⁴ Kazandjieva²⁵ then provides vivid examples of auto-aggression markings that his countrymen self-inflicted after the Communist takeover. This included glans penis tattoos which are described as producing great pain. 15,25 One political candidate, while campaigning, is reported as suggesting punitive action for those HIV+ by "putting indelible, glow-in-the-dark tattoos on [their] genitals."26 Traumatic tattoos associated with gunpowder explosions and blast burns are also mentioned on the glans penis.27

Two studies also described inmates with genital tattoos and discussed how these markings demonstrated aggressive behavior within this type of environment. Here large, colorful tattoo designs and wording on the glans penis tattoos were described²⁸⁻²⁹ which seemed to satisfy the inmate's flaunt of personal pain endurance. Additionally, Cuban refugees (Marielitos) fleeing to the U.S. were reported as having genital tattoos; they also were

Four other reports described those with penile tattoos also routinely inserting foreign bodies^{12,30} and paraffinoma^{12,31,32}into the penis. In Pehlianov's study (also in Bulgaria) they included a control group of another 25 men with genital tattoos. Recently, a unique case of non-ischemic priapism for 3 months was reported³³ following prolonged bleeding from a manual penile tattoo procedure in Iran. The authors suggested the hand-held tattoo needle had penetrated too deeply producing an arteriovenous fistula and the subsequent persistent half-rigid priapism. The authors also noted that the 21 year old patient expressed no regret, depression, or other complications related to the genital tattoo.

Original Study

The initial study queried males with genital piercings using available internet survey software, ¹² as it was considered a hidden variable. Anonymity and access to people nationally and internationally were major advantages for using this nontraditional approach. The university institutional review board deemed the study status as Exempt. To obtain quantitative and qualitative data about those men with genital piercings, an 83 item web-based survey was used; overall results, and another subsample of this data, are published elsewhere. ¹¹⁻¹²

Subsample of those with Penile Tattoos

From the original 445 male genital pierced individuals that responded to the question regarding having tattoos on their penis, 14 replied affirmatively. This subsample had previously been determined not be an outlier of the larger group of genital pierced men. While a short general description (age span at the time of tattoo procurement, urethral "play," design types, motives, and tattooists) about the 14 member genital tattoo subsample was published in 2010, 12 further investigation leading to quantitative and qualitative (Figure 1) data is presented here.

Figure 1: Subsample Respondent Qualitative Quotes

- *Black tribal flames on the top of the shaft, done at [age] 38
- * For erotic reasons, self done with no complications, done at [age] 54
- *I got it because I wanted it. After it was finished I realized I needed it, done at [age] 30
- * I self tattoo'd my penis on the glans and around the corona ridge in order to make up for its' lack of size and to enhance its appearance. I used a sailmaker's needle and Indian ink and there were no complications, done at [age] 43.
- *one small cross pigment tattoo!
- *I'm a little more than average in size, but I still have issues with my genitals. The way they look and their size. Piercings and tattoos have helped me quite a lot.

*I sketched a rose one day, like[d] the design, decided to get it tattooed on my penis. The stem is green with some yellow highlights, the bud is red, all black outline. The tattoo was applied with a standard machine . . .healing was actually quicker and easier than any of my other tattoos.

*It's a little heart just next to 'captain hemingway' which I hand poked and used india ink for it when I was 17... thought our penis deserved a reminder of our affection . . .no complications experienced but since it was hand done with a [sterile] needle it's kind of blurry

This subsample had significantly more foreskin genital piercings (chi-square = 11.5) = 1; P = .001), whereas the most common genital piercing of the larger group of those without genital tattoos¹¹ had Prince Albert piercings (inserted through external urethra). No question inquired which came first, the genital piercing or genital tattoos.

Data Analysis

For this subsample analysis, (and original study¹¹⁻¹²), IBM SPSS 21was used to obtain frequencies and chi-square analysis. Cross tabulations for the subsample were obtained by comparing those with and without penile tattoos.

RESULTS

Demographics

Almost all of the subsample respondents with penile tattoos were reportedly Caucasian (92%) and their ages ranged from 18 to 67 years (average 42.3). Of those that replied, six lived in the U.S. and five cited various international locations. Over half had vocational or college education (64%) and significantly more were likely to be single (25%) or divorced (25%), (chisquare 12.6) = 5; P = .027). Data regarding religious faith was weak to non-existent (75%). Respondents self-reported a good state of health (92%) (chi-square = 8.7) = 3; P = .034), yet 50% cited no annual health check-ups.

Risk Behaviors

Within this subsample, there was no consensus about being a "risk taker". Recreational drugs were reportedly not used (91%), over half were non-smokers (55%), but monthly alcohol use with binge drinking (5+ or more drinks) was cited (78%). Their "motives for genital tattoos were for esthetics, sexual, and personal pleasure"¹²; a variety of penile tattoo designs were described (Figure 1), created either "by studio artists (n = 11) or self-inflicted (n = 3)".¹² All of them described having other body art, such as piercings and other general body tattoos. Some reported an average of 4 piercings (81%) and a significant amount of general body tattoos (average 3.5) (chi-square = 11.1) = 5; P = .049), that still interest them (85%) (chi-square = 8.9) = 3) P = .031).

Sexual Activity

This subsample's average age of first intercourse was 17 years, with most citing women as their sexual partners (92%), most preferred penile/vaginal intercourse (79%), and only one respondent reported a sexually transmitted infection (gonorrhea). When asked about any forced sexual activity (rape), this subsample had a significant amount of those who answered affirmatively (23%) (chi-square = 7.7) = 1; P = .005). Virtually no sexual, physical, or mental abuse was reported.

Need for Uniqueness

A four-item scale called the Self-Attributed Need for Uniqueness (SANU)³⁴ was present in the survey to determine the respondent's self-view (Cronbach alpha = .86). Using a Likert scale, the subsample's moderate, strong and very strong perspectives were collectively summarized. These respondents with penile tattoos preferred to be different (79%), distinctive (86%), intended to do things to make themselves different than those around them (72%), and reported a Need For Uniqueness (93%) (Cronbach alpha = .77). To validate this finding, when all 5 responses of SANU were totaled,¹² the mean was 12.43 documenting a more positive perspective for intentionally wanting to be different, distinctive, and unique.

DISCUSSION

This article reviewed both the cross cultural and medical literature about those with genital tattoos, as well as included both a quantitative and qualitative subsample data analysis of a small group of men who specifically reported penile tattoos. Yet, with certainty this small sample size produced limitations and reporting/survey bias. Additionally, any generalizability with the findings of this subsample should be noted as the respondents could have self-selected their participation and used their personal judgment to interpret the survey questions in this non-experimental cross-sectional study using internet survey methodology.¹²

From this review and to our knowledge, few have studied groups of men with genital tattoos, a difficult group of subjects to find with this hidden variable. 12,31 Cultural descriptions documented a long, rich history 12, 14-17, 29,31 of genital markings for esthetics, sexual enhancement, and tribal status, whereas the medical literature reflected limited observational type information, and few actual case histories or scientific studies. Although there were no mental health evaluations 12 cited in this medical literature, more psychopathic, deviant behavior discussions were made about the individuals with genital tattoos. 16-18,26,32,35 In contrast, two authors 30,33 comment on the "normalcy" of their patients that presented with genital tattoos.

Genital tattoos may be more common than this very small subsample size suggested as great emphasis has been placed on male penile size in many cultures, for a long time.^{31,36} The augmentation of these genital markings and decorative designs

seemed to have motivated their sexual health, self-enhancement⁹⁻¹⁰ and well-being.³¹ Thus, when further studies are considered for this population with a hidden variable, these findings should assist with further ideas of investigation.

Current society has a strong 25 year renaissance of procuring tattoos with at least one in five, and perhaps even four, individuals possessing a tattoo, on virtually every part of their body, without major complications. This small subsample of those who have genital tattoos validates some similarities to those who wear general body tattoos such as a single heterosexual orientation, possessing some college/vocational education, monthly binge drinking, 1,3-5,10 and a strong propensity for a Need for Uniqueness. 4-5,37 They were major body art wearers and continue to enjoy them, as others have also reported. 4-5,10-12

Yet other demographic assumptions were challenged for this subsample of men with genital tattoos. These international respondents tended to be older Caucasians and not as ethnically diverse; there also was not a consensus as to them being risk takers, as has been repeatedly reported by many other body art respondents. 1,3-5,11-12

Subsample respondents reported their average first occurance of sexual intercourse at age 17, similar to the national figures.³⁸ Significant experiences of rape were also reported in this subsample, as in women with genital piercings.^{4-5,9-10}The national rate for forced sexual activity is 10.5%³⁸ and those with genital tattoos reported over twice that amount (23%). No sexual abuse was reported in contrast to a recent German study³⁹ examining general body tattooing.

As with any type of invasive procedure, there can be complications with certain types of body art. When these complications occur, body art wearers typically first seek the internet and/or their studio artist for health advice before presenting to clinicians. 1,8,10-12 Yet, overall for the amount of general tattooing done, this type of body art produced limited documented complications and more potential concerns. 7-8,11, 30,33 More complications were reported when the tattoos contained colored pigments. 6

These tattoos are an integral part of their cultural and personal expression. ^{12,31,33} From our experience many of these male patients with genital tattoos are not seen primarily because of their decorative markings, ³¹ but during clinical evaluations for other issues presented with the normal range of urologic issues involving overall genitourinary and sexual function. Genital tattoos can be an ambivalent findings for many clinicians, but these indelible skin markings (tattoos) are only skin deep, ⁴⁰ and provide valuable cues such as a history of sexual trauma. ³⁹ Currently more genital tattoos are seen among our freedom-impaired patients, where the prevalence of general body tattoos among the inmates can be as high as 67%. ⁴¹

Anecdotally, when healthcare staff discover a patient with genital body art, this discovery can be met with judgmental attitudes and behaviors which could impact care. To adequately assess, evaluate and treat the individuals that have chosen to have genital tattooing, clinicians should strive to provide a thoughtful, nonjudgmental patient-centered approach, along with a generous application of health education, for their present, or even future body art.¹¹

Acknowledgements

The authors acknowledge the grateful assistance of Margaret Vugrin, MSLS, AHIP, Reference Librarian, Texas Tech University Health Sciences Library, Lubbock, TX The authors disclose no conflict of interest or research support for the development of this manuscript. Author Contributions: TN/MLA/AR-research design & analysis; Draft manuscript-TN/MLA/CY/LH/KR/AR

Competing Interests

None declared

Author Details

THOMAS NELIUS MD, Ph.D. Assistant Professor, Texas Tech University Health Sciences Center Department of Urology, School of Medicine, Lubbock, TX 79430 USA. MYRNA L. ARMSTRONG Ed.D., RN, FAAN, Professor Emerita, Texas Tech University Health Sciences Center School of Nursing, TX 78654 USA. CATHY YOUNG, DNSc, FNP-BC, FAANP, FAAN, Associate Professor, Tarleton State University, Texas 76028 USA. ALDEN E. ROBERTS, Ph.D. Professor, Department of Sociology, Anthropology and Social Work, Texas Tech University, Lubbock, TX 79409, USA. LA MICHA HOGAN, MSN, RN, FNP-BC, Clinical Instructor, Texas Tech University Health Sciences Center School of Nursing, Lubbock, TX, USA 79430. KATHERINE RINARD, MD, Tx 79601, USA. CORRESSPONDENCE: MYRNA L. ARMSTRONG Ed.D., RN, FAAN, Professor Emerita, Texas Tech University Health Sciences Center School of Nursing, 39 Augusta Dr, Marble Falls, TX 78654 USA.

Email: myrna.armstrong@ttuhsc.edu

REFERENCES

- Armstrong ML, Pace-Murphy K. Tattooing: Another risk-behavior in adolescents warranting national health teaching. Applied Nurs Res. 1997;10(4): 181-189.
- Braverman S. The Harris Poll: One in five US adults now has a tattoo. Retreived 5/16/13 from www.harrisinteractive.com/NewsRoom/HarrisPolls/tabid/.../Default.as
- Armstrong ML, Roberts AE, Owen DC, et al. Toward building a composite of college student influences with body art. Issues Comprehensive Ped Nurs. 2004;27:277-295.
- Koch JR, Roberts AE, Armstrong ML, et al. Body art, deviance, and American college students. Soc Science J. 2010;47(1):151-161.
- Owen DC, Armstrong ML, Koch JR, et al. College students with body art: Well being or high risk behavior. J Psych Soc & Mental Health Services. 2013;51(10): 20-28.
- Wenzel SM, Rittmann I, Landthaler M, et al. Adverse reactions after tattooing: Review of the literature and comparison to results of a survey. Dermat 2013;226(2):138-147. DOI:10.1159/000346943
- Mayers L, Chiffriller SH. Body art (body piercing and tattooing) among undergraduate university students: Then and now J Adol Health. 2008;42:201-203.
- O'Malley PA. Pharmacology Consult: Tattoos and piercings: Reasons, risks, and reporting. Cl Nurs Spec. 2013;27(1):14-16 DOI: 10.1097/NURS.Ob013e31827c28a5.
- Hogan L, Rinard K, Young C, et al. A cross-sectional study of men with genital piercings. Br J Med Pract. 2010;3(2):315-322.

- Young C, Armstrong ML, Mello I, et al. A triad of evidence for care of women with genital piercings. J Am Acad NP. 2010;22:70-80.
- Nelius T, Armstrong ML, Rinard K, et al. Genital piercings: Diagnostic and therapeutic implications for Urologists. J Urology. 2011;78;998-1008
- Rinard K, Nelius T, Hogan L, Young C, et al. Cross-sectional study examining four types of male penile and urethral "play". Urology. 2010;76(6):1326-1333.
- Weismantel M. Moche sex pots: Reproduction and temporality in Ancient South America. Am Anthropologist. 2004;106(3):495-505.
- Angulo JC, Garcia-Diez M, Martinez M. Phallic decoration in paleolithic art: Genital scarification, piercing and tattoos. J Urology. 2011;186:2498-2503.
- Rowanchilde T. Male genital modification: A sexual selection interpretation. Human Nature. 1996;7(2):189-215.
- Van Der Horst C, Martinez P, Seif C, et al. Male genital injury: Diagnostics and treatment. BJU Int. 2002;93:927-930.
- Tsunenari S, Yonemitsu K, Kanbe T, et al. How to identify the Yakuza, Japanese racketeers—their sociology, criminology and physical characteristics. Ann Acad Med. 1984;13(1);25-31.
- Post RS. The relationship of tattoos to personality disorders. J Criminal Law, Criminology and Police Science. 1968;59(4): 516-520.
- Fatteh A. Handbook of Forensic Pathology. 1973 Philadelphia: J.B. Lippincott.
- Burton JL. The external examination: An often-neglected autopsy component. Curr Diag Path. 2007;13:357-365.
- Barry MJ. Tattoos and identity (Letters to the journal). Canad Med Ass J. 1963;89:1044.
- Grumet GW. Psychodynamic implications of tattoos. Amer. J. Orthopsychiat. 1983;53(3):482-492.
- Burg BR. Tattoo designs and locations in the Old U.S. Navy. J Am Culture. 1995;18(1):69-75.
- 24. Adatto M. Living Skin, 1993: Basle: Editiones, Roche.
- Kandijeva J, Kamarashev J, Kadurina M, et al. Unprofessional tattoos in Bulgaria – psychological aspects. JEADV. 1995;4;254-259.
- David Duke, running for governor proposes tattooing people with HIV. AIDS policy & law. 1995(May 19); 53:7.
- Baruchin AM, Schaf S. Care of traumatic tattoos associated with gunpowder explosions and blast burns (Section V: Chapter 54). In M. Masellis & SWA Gunn. The Management of Mass Burn Casualties and Fire Disasters. 1992 Netherlands: Springer Kluwer Academic Publishers 292-295.
- 28. McCarron K. Skin and self-indictment: Prison tattoos, race, and heroin addiction. ESC. 2008;34(1):85-102.

- Martinez RMA, Wetli CV. Tattoos of the Marielitos. Am J For Med & Path. 1989;10(4):315-325.
- Matsuzaka J, Aoki H, Banya Y, et al. A foreign body of the corpus cavernosum in a patient with cleft glans penis: A case report. Acta Urol. Jpn. 1994;545-547.
- Pehlivanov G, Kavaklieva S, Kazandjieve J, et al Foreign-body granuloma of the penis in sexually active individuals (penile paraffinoma). JEADV. 2008;22:845-851.
- Scholten E, Nanhekhan LV, Oudit DM, et al. Scrotal and penile reconstruction after massive self-injection of liquid paraffin and petroleum jelly. Plas & Recont. Surg. 2005;115(7):2168-2169.
- Zargooshi J, Rahmanian E, Motaee H, et al. Nonischemic priapism following penile tattooing. J Sex Med. 2012; 9:844-848.
- 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.
- Taylor AJW. Criminal tattoos. Int.Rev. App Psychol. 1974; 29(2); 121-129.
- 36. Wylie K. The way forwards with the obession with the penis. Sexologies. 2008; 17:S46.
- Tiggemann M, Golder F. Tattooing: An appearance-based expression of uniqueness. Body Image: Int J Research. 2006;3:309-315.
- Guttmacher Institute. Facts on American Teens' Sexual and Reproductive Health. Retrieved 5/26/13 from www.guttmacher.org/pubs/FB-ATSRH.html
- Stirn A, Oddo S, Peregrinova L, et al. Motivations for body piercings and tattooss—The role of sexual abuse and the frequency of body modifications. Psych Res. 2011;190(2-3):359-363.
- Susman J. Perspicacity, profiling, and prejudice. J Fam Prac. 2007;56(2):83.
- Titilayo CA, Balogun JA, Adefuye AS, et al. Body art practices among inmates: Implications for transmission of bloodborne infections. Am J Inf Control. 2010;38(2):121-129.