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RESEARCH

A triad of evidence for care of women with genital piercings

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Abstract

Purpose: To add three further dimensions of evidence for the care of women with genital piercings (GPs).
Data sources: Following a literature review, a cross-sectional study replicated previous work, using a web-based survey. This triad of evidence provides (a) descriptive quantitative data ($N = 240$) about women with GPs, (b) qualitative data about women with GPs, as well as (c) clinical observations from 60 healthcare providers (HCPs) who have cared for women with GPs.
Conclusions: Three important findings about women with GPs were validated: (a) GPs were deliberate actions, sought for personal and sexual expression; (b) women with GPs treat piercings as a normal, meaningful part of their lives which produce sexual enhancement and expression; and (c) they continue to seek information about GP care from nonhealth providers. New data indicate that they have experienced depression (47%), abuse (physical 18%; emotional, 27%; sexual, 14%), and forced sexual activity (35%) in their lives. Several unsubstantiated assumptions about women with GPs are challenged with these data.
Implications for practice: GPs should not delay important health care. Health-protective, as well as health promotion, behaviors are important to reduce risks. Nurse practitioners (NPs) can become effective and resourceful advocates in three specific areas of care: (a) responsiveness to women with GPs, (b) collaborative decision making for the removal of jewelry, and (c) promotion of applicable patient education.

Introduction

Body piercing has been said to be a ''visible violation of socially defined beauty standards and body boundaries'' that ''arouses social provocation'' (Stirn, 2003, p. 212). Yet, now it has also been called as a ''social reality'' (p. 213). This is evidenced by young adults who have moved general body piercing out of the American West Coast sexual underground and ''punk'' culture where it was supposed to shock and provoke into one of this nation's mainstream activities in less than 30 years (Benson, 2000). As a part of this preoccupation of transforming and modifying the body, very few areas have escaped becoming a puncture site; so women with genital piercings (GPs) are not surprising. GP is defined as developing a tract under the skin with a large bore needle for the penetration of jewelry into this anatomical region (Armstrong, Caliendo, & Roberts, 2006; Stirn, 2003). Most of these piercings are located around the clitoral hood and/or the labia areas (Anderson, Summerton, Sharma, & Holmes, 2003; Young & Armstrong, 2008).

Unfortunately, women with complications arising from their GPs have described seeking assistance from the

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Internet or their piercer, rather than healthcare providers (HCPs) (Caliendo, Armstrong, & Roberts, 2005). This is further substantiated as HCPs have described little understanding of body modifications, limited communication with clients about their piercings, and scant awareness of health issues related to body piercing (Young & Armstrong, 2008). With a paucity of information on which to base treatment decisions, the health status of women with GPs could be at risk. Thus, further evidence for the nurse practitioner's (NP) practice is needed to ensure holistic patient outcomes (Layman, 2008). Evidence-based practice (EBP) is an important standard for this care because it is based upon research, as well as the inclusion of clinical experiences and client preferences; thus, healthcare providers (HCPs) do not have to rely on ''trial and error to resolve patient problems'' (Layman, 2008, p. 15; Melnyk & Fineout-Overholt, 2005).

Nursing is a science of recognizing human responses, including how ''people process and manage health issues in their every day lives'' (Grace & Powers, 2009, p. 27), yet some HCPs could be so distracted by the GPs that important health care is delayed (DeBoer, Amundson, & Angel, 2006). The purpose of this study was to add a triad of further evidence for the care of women with GPs. Demographics, risk behaviors, motives, outcomes, as well as procedural and postpiercing experiences were closely examined. The research component was a replicated women with GPs study (Caliendo et al., 2005) which provided (a) descriptive (quantitative) data, (b) patient preferences (qualitative data) about the women with GPs, and (c) clinical observations of HCPs who had provided care of women with GPs. By knowing more about these culturally diverse women with GPs, HCPs can assist effectively in health promotion, self-care strategies, and decision making with them (Blais, Hayes, Kozier, & Erb, 2002). Authors of this study have extensive experience with various aspects of piercing, including an expert piercer with over 25 years of GP experience (EA), two NPs working with pierced individuals (CY/IM), and a nursing faculty with two decades of published body art research (MA).

The literature

The lay literature frequently suggests that GPs are enjoyable, either for personal satisfaction, esthetics, and/or for increased sexual pleasure (Angel, 2009; Waldorf, 2007). Women have reported their first orgasm following GP (Ferguson, 1999).

No studies regarding attitudes and perceptions of HCPs toward women with GPs were found, yet when GPs are discussed in the medical/nursing literature, the descriptive terms seem to project ''discriminative overtones'' (Stirn, 2003, p. 1212). The piercings are described as ''painful,'' ''erotic,'' and ''mutilating'' (Beers, Meires, & Loriz, 2007; Meltzer, 2005), while women with GPs have been characterized as ''hard, on the fringe, sadomasochistic, or with fetishism'' (Armstrong et al., 2006; Ferguson, 1999; Stirn, 2003). Health problems attributed to women with GPs include ''allergic metal reactions and rejections, scarring, bleeding, impotence and sterility, loss of sexual response, tearing, high rates of sexually transmitted diseases (STDs),'' and increased human immunodeficiency virus (HIV), as well as viral hepatitis, streptococcal toxic shock syndrome, and ''inflammatory pelvic bowel disease'' (Armstrong et al., 2006; Caliendo et al., 2005, p.247; Kaatz, 2008, p. 41; Millner, Eichold, Sharpe, & Sherwood, 2005; Willmott, 2001). Additionally, frequent infections and piercing rejections are attributed to ''periurethral microflora and feces contaminates, exercise such as walking and riding bicycles, and hormonal changes, menstrual cycles, and pregnancy/delivery aggravations'' (Caliendo et al., 2005 p. 247).

In spite of these assumptions, few studies reflect scientific evidence. In an unpublished doctoral thesis, ''desired transcendence, that is a voluntary and an intensely personal act performed to enhance the self'' is the way Caliendo (1999) described the lived experiences of eight women (mean age 26 years: education 15 years) with nipple and/or GPs (p. 476). Only two published quantitative studies with over 30 women with GP participants were located (Caliendo et al., 2005; Millner et al., 2005). Identified characteristics included primarily Caucasian females averaging 28 years, heterosexual, single, possessing undergraduate college degree, an annual income around $45,000, and in good health. Procurement reasons listed sexual enhancement, expression, pleasure, and esthetics. Only the Caliendo et al. (2005) study ($n = 35$) inquired about health problems resulting from piercings; 11 (31%) reported complications including site sensitivity (4), skin irritation (2), sexual problems (2), and site infection, keloid (1), and urinary tract infection (1), respectively.

Another procurement reason cited for GPs was therapeutic and psychological healing after traumatic events, such as sexual abuse or rape (Stirn, 2003). These deeply personal events produce feelings of loss that often predispose an individual to reclaim that part of the body, thus exerting self-control, while improving their self-esteem. This ''wounded spirit'' recovery is best expressed by Musafar's (1996) quote:

> ''I'm getting pierced to reclaim my body. I've been used and abused. My body was taken by another without my consent. Now, by this ritual of piercing, I claim my body back as my own. I heal my wounds'' (p. 329).

Infibulations, for the intended purpose of ''preventing further sexual contacts and defending the area against any further intrusion'' were also described by Stirn (2003) as a procurement reason for GPs (p. 1213). Some women with GPs perform infibulations by ''chaining their labia jewelry.'' In contrast, the American Psychiatric Association DSM-IV-TR (2000) lists ''pinning and piercing (infibulations)'' as masochistic acts of sexual and gender identity disorders. The presumption is that piercings are masochistic if the intent is ''to suffer'' or if masochistic fantasies occur, individually or with a partner.

Further research evidence

For further information about women with GPs, a triad of evidence was obtained in the form of (a) quantitative and (b) qualitative data from women with GPs and (c) HCPs' clinical observations when caring for women with GPs. To ensure the rights and dignity of all research participants, exempt study status was obtained from the university institutional review board. For these studies, requesting information from (a) women with GPs and (b) HCPs who cared for them, self-reported data were collected from Internet researcher-developed questionnaires using Survey Monkey (Portland, OR). The web survey was available to respective respondents for 6 months during 2008. Both sets of respondents were asked not to be offended by questions as some related to assumptions written about women with GPs in the general and medical literature (Caliendo et al., 2005). Honesty in the survey was encouraged to gain a clear description of women with GPs. Survey completion indicated consent to participate in the study and participants were informed that they could stop at any point during the survey if uncomfortable with question(s). Assurances were provided that findings would be analyzed as group data and no identifying information would be sought.

First and second source of evidence: Replicated women with GPs study

Data collection

Women with GPs have a hidden variable of interest, and thus can be difficult to locate. In 2008, an opportunity arose to obtain further information about women with GPs so the Caliendo et al. (2005) study was ''approximately'' (Burns & Grove, 2003, p. 227) replicated. For this study, two types of sampling methodology were helpful to generate participation, including networking or ''snowball'' sampling. Previous research on this and other related body art topics have successfully used advertising in nontraditional newspapers to recruit women with GPs (Armstrong, 1991; Caliendo et al., 2005). Limited funding for advertisements in alternative newsweeklies in 2008 necessitated careful selection of location. Our expert piercer/author recommended targeting the West Coast (including NV and HI) and the Southwest regions for recruitment.

The other sampling methodologies took advantage of emerging worldwide Internet survey capabilities. Our expert piercer author (EA) posted the request for participation on popular body piercing sites. For both newspaper advertisements and the web-based announcements, requests for study participants stated nurse researchers were seeking anonymous, personal information about care and lifestyle in women with GPs. A web site address was provided for participation.

Items on the questionnaire were based on an ongoing review of literature, the Armstrong Team Piercing Attitude Survey (Armstrong, Roberts, Owen, & Koch, 2004), a modified questionnaire (Caliendo et al., 2005), previous work with women with GPs, and our author/expert piercer (EA). The survey had various scales: motives for GPs (14), outcomes of GPs (16), as well as personal experiences (37), demographics (22), and pregnancy (7). Two additional concepts that had recently surfaced in body art research included depression (Carroll & Anderson, 2002; Roberti & Storch, 2005) and reclaiming the body (Stirn, 2003). Questions on alcohol consumption that had been omitted in the Caliendo et al. (2005) study were also incorporated. Various response formats were used throughout the survey, including a 5-point Likert scale (1 = strongly disagreed or unlikely to 5 = strongly agreed or likely), multiple choice, and short answers. Comment boxes were strategically placed to capture any participant responses. Subjective collection of qualitative data was based on Armstrong's previous research experience on tattooing and body piercing where participants wrote ''detailed comments'' to share as much information with HCPs as possible (Armstrong, 1991; Caliendo et al., 2005, p. 477). As validation was uncertain in individuals actually having GPs with an anonymous web-based survey, questions were tailored making it difficult and time-consuming to answer if the respondents did not have knowledge of GPs (Armstrong et al., 2006; Caliendo et al., 2005).

Data analysis

The Statistical Package for the Social Sciences (16.0 Edition) was used for data analysis to obtain frequencies and alpha scores for select subscales within the questionnaire. Additionally, *t*-tests were used to compare means of similar questions from the Caliendo et al. 2005 study survey and this replicated study sample. Significant

demographic differences were found, so a combined analysis was not performed and the study samples were judged as two different groups. Responses to open-ended questions were examined for themes, individually by two authors (CY/IM), then compared by all three nurse authors (CY/IM/MA), and the expert piercer (EA), then incorporated throughout these study findings.

Results from the replicated women with GPs study

Demographics

Responses were received from 240 women with GPs residing in 45 states and 6 international countries. Clusters of participants were evident from TX (19), CA (18), WA (9), and Canada (9). Ages ranged from 17 to 61. Twelve (6%) learned of the study after reading newspaper advertisements, 73/39% from searching the Internet, and 102/55% from e-mail networking. Detailed information about the sample is located in Table 1 (demographics), Table 2 (risk behavior), Table 3 (GP procedure), Table 4 (postpiercing activities, including pregnancy), and Table 5 (motives and outcomes for their GPs). The average the participant in this study was 32 years of age, Caucasian, married, in excellent health, who sought out annual physicals, had an undergraduate or graduate degree, reported no friends with GPs, and declared salaries of around $45,000. A wide range of technical/vocational occupations, as well as professional roles, including nurses, teachers, and accountants, were cited. Religious beliefs were either nonexistent or moderate to very strong.

Surprisingly, over half of the women with GPs reported abuse (whether emotional, physical, or sexual), and over a third had experienced forced sexual activity against their will. Subjective comments provided numerous stories ($n = 74$) of both abuse and rape. Additionally, almost half responded positively when asked whether they had been told they were depressed. Unfortunately, no further questions were included in the survey about whether this occurred before or after the GP procedure.

Risks

Those considering themselves risk takers at the time of their piercing currently continue to feel that way. Over half had experienced their first sexual intercourse between 14 years and 16 years of age and a third are now in a monogamous, heterosexual marriage or relationships (Table 2). Most did not smoke or use drugs routinely. Alcohol intake was infrequent (1–3 times monthly), but when they consumed, they reported 5+ drinks consecutively. As part of their personal expression, almost half reported 5+ piercings, with over a third having 1–4 tattoos.

Table 1 Self-reported characteristics of women with GPs

Variable	Replicated study ($N = 240$)
Demographics	
Age[a]	
17–24	61/29%
25–34	77/36%
35–44	41/19%
45+	33/16%
Ethnicity[a]	
Caucasian	184/89%
Martial status[a]	
Single	54/26%
Married with/without children	77/37%
Education[a]	
High school	22/10%
Bachelor's degree	66/31%
Master's degree+	34/16%
Occupations	
Technical/vocational	116/57%
Professional (includes teachers, nurses, lawyers and CPAs)	23/11%
Students	45/22%
Salary[a]	
<45,000	109/60%
$45,000+	72/40%
Strength/religious faith	
Nonexistent	77/37%
Mod strong–strong	86/41%
State of health	
Fair	20/9%
Excellent	69/32%
Annual physicals	
Yes	176/83%
Friends w/GPs	
None	123/58%
1–3	77/36%
4+	13/7%
Told they are depressed	99/47%
Felt abused	
Physical	43/18%
Mental/emotional	64/27%
Sexual	34/14%
Forced sexual activity	72/35%

[a]Numbers will not always add up to 100 because of missing data or multiple answers.

GP procedure

Deliberate decision making with a 2-year waiting period was present between GP consideration and procurement. Most women chose a clitoral hood piercing. Almost no one used drugs and/or alcohol before their GP procedure. The average GP procedural cost was $73, with women with GPs experiencing ''some'' pain and bleeding. Subjective comments frequently indicated that their

Table 2 Self-reported risk behavior from women with GPs

Variable	Current replicated study ($N = 240$)
Risk behavior	
Age at first intercourse	
11–13	18/9%
14–16	119/59%
17–20	60/30%
Sexual orientation	
Men	143/69%
Women	7/3%
Both	44/21%
Risk taker before piercing	86/40%
Remains risk taker	87/40%
Cigarettes smoked	
None	162/78%
1/2 pack daily	27/13%
Alcohol consumption	
1–3 times	90/42%
5+ drinks at one setting, 1–3 times	122/61%
Drugs used monthly	
None	172/83%
1–10 times	24/12%
Sexual partners in 6 months	
One	141/68%
Two or more	47/23%
General body piercings	
1–4 piercings	93/48%
5+ piercings	94/49%
Tattoos	
1–4	88/41%
5+	72/34%

Note. Numbers will not always add up to 100 because of missing data or multiple answers.

Table 3 Self-reported procedural information from women with GPs

Variable	Replicated study ($N = 240$)
GP procedure	
Amount of decision time	
A few months	44/20%
A long time (over a year)	79/36%
GP decisions	
Consideration	25 years
Procurement	27 years
Type of GPs	
Clitoral hood (horizontal/vertical)	181/75%
Labia	73/30%
No drug/alcohol at piercing	211/97%
Small-mod amount of pain	172/79%
Small-mod amount of bleeding	137/63%

Note. Numbers will not always add up to 100 because of missing data or multiple answers.

''significant other'' was present during the procurement and remains supportive of their GPs.

Table 4 Self-reported postprocedural information from women with GPs

Variable	Replicated study ($N = 240$)
Post procedural experiences	
Have had partners refuse sex	4/2%
Reported STDs since piercing	None
Still like GP	193/90%
Would do it again	209/97%
Sports/exercise involvement	
None	46/19%
Jog/ride bike/exercise, etc.	194/81%
Complications from piercing	
No problems	153/64%
Site hypersensitivity	54/23%
Skin irritation	20/8%
Site infection	8/3%
Keloids at site	10/4%
Sexual problems	1/<1%
Urinary tract infection	3/1%
Other, not named	15/6%
Pregnancy reported, following piercing	25/45%
Asked to remove jewelry	
Yes	14/38%
No	23/62%
Did remove jewelry	
Yes	15/46%
No	18/55%

Note. Numbers will not always add up to 100 because of missing data or multiple answers.

Postprocedural experiences

The women definitely liked their GPs and almost all would do it again. Only a few (four) said partners had refused sexual activity with them. Frequently, they spoke of daily skin care and periodic applications of sea salt solution as important measures toward effective genital hygiene. While 64% ($n = 153$) cited no problems with their GPs, 87 (36%) respondents reported 114 problems with them. Site sensitivity was a frequently mentioned health problem, followed by skin irritation. ''Other'' subjective comments included ''a poor piercing or procedural problems''; a few discussed the presence of scar tissue or urinary tract infections. Bleeding or STDs were denied after their piercings. In this section, many subjective comments centered around using condoms and/or being in a monogamous relationship.

The physical and/or athletic activities mentioned were astounding. For example, many mentioned hiking, horseback riding, kickboxing, volleyball, and/or ballet. Accompanying subjective comments ($n = 152$) reported no interference; in fact, many said, ''I actually forget that it's there.'' One woman summed up their comments:

> I do nothing different than before I had them. If they interfered with my daily routine I would not have

Table 5 Self-reported motives and outcomes for their GPs, from women with GPs in two studies

Variable	Caliendo et al. 2005 study: data collected 2000 women with GPs ($N = 35$)	Current replicated study data collected 2008 women with GPs ($N = 240$)
Motives for their GP	20/57% ''Just wanted one''	163/70% ''Just wanted one''
	18/51% ''Trying to feel sexier''	120/51% ''Trying to feel sexier''
	15/44% ''Make myself more attractive''	111/48% ''More control over my body''
	12/34% ''Wanted to be different''	93/40% ''Seeking uniqueness''
	8/23% ''For the heck of it'' (alpha 0.63)	91/39% ''Make myself more attractive'' (alpha 0.75)
Outcomes of their GP	30/86% ''Helped express myself sexually''	176/76% ''Helped express myself sexually''
	29/85% ''Improved my sexual pleasure''	173/75% ''Improved my sexual pleasure
	24/68% ''Helped me feel unique''	157/68% ''Helped me express myself
	22/65% ''Helped express myself''	134/58% ''Helped me feel feminine''
	18/51% ''Helped me feel independent'' (alpha 0.83)	134/58% ''Helped me feel unique'' (alpha 0.88)

Note. Not all subjects responded to the question.

> obtained them nor would I keep them. On top of that—inappropriate gauge size and jewelry type would be the top reasons they would be problematic anyhow and it would be my responsibility to fix that problem.

Pregnancy

Twenty-five participants reported thirty-seven pregnancies since their GP procurement. Over half were not asked to remove their jewelry before delivery, did not remove their piercings during the delivery, and reported no subsequent complications to either themselves or the infant. Those removing their piercing(s) voiced concerns that they felt they ''had been ordered to remove them,'' without any dialog during their first office visit when HCPs were speaking of the delivery plans.

Motives and outcomes

Table 5 provides a listing of participants' motives and outcomes, both from the Caliendo et al. 2005 and the current replicated study. Interestingly, in both studies, the top two rated motives and outcomes statements were the same; the others, while interposed, were also similar. Motives for seeking GPs were personal and sexual expression; their GP outcomes were documented by their satisfied reports of sexual enhancement and sexual expression; self-control, feelings of uniqueness, and esthetics were also reported frequently. One woman provided this explanation:

> My piercings are a part of my sexuality. They help accentuate the sensations I experience when touched, therefore directly affect my sexual experience. Before genital piercings I had little to no sensations in my labia (majora or minor) and certainly no clitoral anything. With the piercings I have some sensations to the areas. I have experimented with them, taking them out, and replacing them throughout the 15 years I've had them. Interactions with the piercing jewelry in place are significantly more sensational.

Women with GPs and their encounters with HCP

Most of the HCP visits centered on annual health check-ups, gynecological exams, and prenatal care. Yet, for best applicable care information they mentioned piercers, piercing organizations, and related websites (bmezine.com). Physician/NPs were only listed four times out of 189 (2%) under comments as an informational source. Some women with GPs did mention their provider's positive responses, while others told of the HCPs demonstrated ''shock and surprise, then veiled curiosity.'' Overall, women with GPs summarized the HCP's health messages as ''keep the area clean, take the jewelry out,'' and ''quit taking risks.'' Frequent subjective comments included (a) ''they (HCP) made no comment,'' (b) ''the provider was friendly until they found the piercing, then they became curt,'' or (c) personal descriptions of how the women with GPs removed their piercing jewelry(s) before the HCP examination to ''avoid all the hassles, hoping it would not close before reinsertion.'' One woman with GP mentioned being handed a ''list of therapist numbers'' before discharge.

Third source of evidence: HCP observations of women with GPs

Data collection

To gather another perspective of women with GPs for this triad of evidence, HCPs ($N = 60$) who reported caring for women with GPs were encouraged to document clinical observations on a different web survey, using the same web site. Many participants for the HCP survey were recruited by the authors (CY/MA) at professional

Table 6 HCPs demographics who shared their women with GP clinical observations

Variables	HCPs $N = 60$
Types of provider	RN = 32/53%
	NP = 18/30%
	CNM = 5/8%
	MD = 3/5%
	RPH, CNS = 2/3%
Clinical location	Clinic = 20/33%
	Hospital = 35/58%
	Other = 5/8%
Provider major area of residence	19 U.S. states /1 International
	TX = 13
	IA = 10
	MO = 8
Estimated women with GPs seen yearly	2 saw 250–500
	2 saw 50–200
	3 saw 40–50
	15 saw 20–40
	10 saw 10–15
	28 saw 1–10
STDs present	No = 41/73%
	Yes = 15/27%
	Types observed
	Chlamydia = 22/37%
	Genital HPV = 22/37%
	Herpes 14/23%
	Trichomonas = 13/22%
	Gonorrhea 7/12%
	HIV 2/3%
Pelvic inflammatory disease common in women with GPs	No = 50/83%
	Yes = 5/8%

Note. Numbers will not always add up to 100 because of missing data or multiple answers.

meetings; network sampling among HCPs was also encouraged. Four demographic and two STD questions are summarized in Table 6 from the HCP survey. The average HCP in this study was a hospital employed RN, who saw 40 or less women with GPs yearly, did not observe many women with GPs with STDs nor believe pelvic informatory disease was common for them.

Data analysis

Ten open-ended questions regarding physical, psychosocial, obstacles with diagnostic procedures, communication approaches, pregnancy, best educational resources, and care needs were asked (Table 7). Depression in the women with GPs was noted by the HCPs, and described to the HCPs by women with GPs, during their clinic/office visits. Obstacles regarding diagnostic procedures triggered subjective responses such as ''OB/GYN MD will not do any exams with GPs in place and women with GPs are told to remove all piercings (including earlobes) to reduce the risk of burns or lacerations during operating room (OR).'' Almost 75% of the HCPs said they talked with the women with GPs, feeling they had a direct and nonjudgmental conversation with them; many said it was easy to engage them in conversation. In contrast, the remaining HCP comments included ''I don't respect these patients-low morals, gross, stupid, disgusting and cheap, and same as mutilation or cutting yourself.''

Many subjective HCP comments about women with GPs centered on labor/delivery care. A few HCPs discussed ''allowing'' the women with GP to keep jewelry in during delivery, while more requested jewelry removal; some HCPs admitted difficulty in removal of the jewelry and cited tears and bleeding. No consensus was present regarding available educational sources present or what they needed to care for women with GPs; some said ''I use commonsense.'' Another questioned ''Is this really a problem warranting this much (research) attention?''

Study limitations and generalizability

Several limitations to generalizability of data must be considered. This was a nonexperimental, descriptive study design and the respondents (both women with GPs and HCPs) self-selected to complete a web-based survey. Self-reporting is subject to bias, inaccurate recall, and or inflation, and use of an anonymous survey allows the respondents to use personal judgment to interpret questions. Participants with strong negative or positive feelings may have been more likely to complete the survey, and the concern always exists regarding socially desirable responses. Yet, as random sampling is almost impossible in a population with hidden variables (Caliendo et al., 2005) and in spite of these limitations, the respondents did contribute further qualitative and quantitative data.

This evidence was based on a replication of previous findings. It was hypothesized that if similar findings were obtained, at two different times, from different respondents, credibility would be enhanced, lending to further generalizability. According to Burns and Grove (2003), if findings from the original study were substantiated despite minor changes in the research conditions . . . findings could be more credible and ''greatly influence the generation of nursing knowledge that can by synthesized for use in practice'' (p. 228).

Discussion

During our review of literature, unsubstantiated assumptions were found increasing the importance of research for better NP knowledge of effective and

Table 7 Summary of open-ended questions on HCP survey

Variable	HCP responses ($N = 60$)
Overall view of women with GPs	
Range of age	20–30 years
Occupations	All types
Educational preparation	High school/some college
Clinical visits due to *physical complications* (tears, site healing, bleeding, etc.) of the GP	Of the 53 comments, mostly with labor/delivery; 31/58% no complications; 7/13% tears; 7/13% bleeding; 5/9% infections; 3/5% pain
GPs identified during other ob/gyn or med-surg situations	Of 49 comments; no trends noted, visits made due to well-women exams, pelvic pain, rape, sexual assaults, annual pap/pelvic exams, and child birth
Psychosocial concerns women with GPs themselves identified	Of 51 comments, 33/65% no concerns expressed; 9/18% depression; 6/12% hypersensitivity; 3/6% ''other''
Psychosocial concerns HCPs identified about women with GPs	Of 52 comments, 23/42% no concerns observed; 9/17% depression; 10/19% abusive situations; 10/19% ''other''
Obstacles when diagnostic procedures ordered	Of 53 comments, 15/28% no obstacles to care; 13/25% patient refuses to remove GP; 11/21% required removal due to policy; 7/13% removal requested to prevent injury; 7/13% ''other'' such as magnetic resonance imaging, computed tomographies & OR
When providing women with GP care, a description of HCP specific	Of 54 comments,
feelings	30/56% feelings no different; 8/15% shocked;
concerns	13/24% psychosocial concerns; 11/20% hygiene/infection risks
What type of HCP communication approaches with women with GPs	Of 52 comments, 38/73% specific and direct, nonjudgmental; 6/12% discussed specific concerns; 4/7% did not discuss; 4/7% discussed only risks/complications
HCP experience/problems during women with GP pregnancy and delivery	Of 56 comments, 23/41% removed their jewelry with/no problems; 9/16% left in with/no problems; 5/9% difficulty with removal of piercings; 19/34% ''other,'' but no trends noted
Current best educational sources for HCP regarding care of women with GPs	Of 50 comments, 14 /28% articles/Internet; 9/18% none/none needed; 7/14% women with GPs/friends with piercings or piercers; 20/40% ''other'' ''commonsense,'' no trends noted
Educational tools and/or information still needed to care for women with GPs	Of 42 comments, 16/38% none; 6/14% how to remove and maintain; 5/12% CE or articles; 16/38% ''other,'' no trends noted

applicable care for women with GPs. This replicated study provided a triad of further (a) descriptive (quantitative), (b) patient preferences (qualitative) evidence, as well as (c) clinical observations of HCPs who cared for women with GPs. To our knowledge, this is the largest repository of data currently available about women with GPs, obtained by networking sampling, as well as an accessible, economical web-based survey which provided anonymous data. Three different snapshots of women with GPs over almost 10 years are now available with data from the Caliendo et al. (2005) study which was collected in 2000, Millner et al. (2005) work, and this study almost 5 years later. Sample demographics reflect individuals were not from low performing socioeconomic backgrounds; HCPs confirmed this also in their observations. In this replicated study, women with GPs were older, more educated, and frequently in a monogamous, heterosexual relationship or married (with/without children). Threads about stable relationships were provided throughout their information, including sexual orientation, marital status, risk behaviors, and support from sexual partners. They generally reported minimal substance use or abuse. Absence of alcohol and/or drug consumption before the GP procedure has been a frequent finding in other body art studies (Armstrong, 1991; Armstrong et al., 2004, 2006; Caliendo et al., 2005; Forbes, 2001).

This scientific evidence continues to pose challenges to many assumptions about women with GPs. Collectively in these studies, the women with GP demographics tended to be 25–35 years, Caucasian, heterosexual, college educated, employed, in good health, from the western region of the United States, and not ethnically diverse (Caliendo, 1999; Caliendo et al., 2005; Willmott, 2001). No mention of hormonal changes during menstruation or pregnancy related to healing time, maintenance, risks of rejections, major medical illnesses, impotence, or sterility were noted. While women with GPs reported no STDs or HIV, only a few cases were reported by HCPs. Further ''longitudinal research is recommended'' for better incidence and prevalence information (Caliendo et al., 2005, p. 482).

These women with GPs ''were open to experience'' (Nathanson, Paulus, & Williams, 2005, p. 794), as validated by their highest motive of ''just wanted one,'' and

definitely liking their GPs; almost all would do it again. This further substantiates Caliendo's ''desired transcendence and personal act'' feelings from her study (1999, p. 476). The GPs seemed an integral part of their lives even noted by their commitment of conscientious hygiene and care; they were trying to promote a healthy, holistic lifestyle. Procurement reasons were personal and sexual expression, with supporting motives (purpose) of esthetics, self-control, and uniqueness. These motives were echoed in the lay literature and the previous women with GP studies (Caliendo, 1999; Caliendo et al., 2005; Millner et al., 2005). Their GP satisfaction was matched by the associated outcomes.

Overall, the GPs did not seem to inhibit these women from participating in exercise, physical activities, or even pregnancy. Postprocedure, almost two-thirds of participants in the Caliendo et al. (2005) and this replicated study, as well as over half of the HCPs in this study, reported no complications present with the GPs. While hypersensitivity seemed their most frequent problem, an issue cited in both Caliendo et al. (2005) and this study, the women's subjective comments stressed it was ''not a BIG deal''; their focus was (a) adjusting clothing to their piercings, (b) acknowledging the hypersensitivity, and (c) responsiveness to minor irritations that occurred.

This study and others (Armstrong et al., 2004; Caliendo et al., 2005; Millner et al., 2005) confirm those with piercings and tattoos are risks takers. Tattooing and general body piercing seemed an important part of their usual personal expression. No infibulations or self-mutilation activities were reported, but the motive of ''having more control over my body'' was present. This purpose could also correspond to the documented history of abuse and forced sexual activity. The high prevalence of reported depression in this study was also found in Carroll and Anderson (2002) and Roberti and Storch (2005) body art studies. Regarding control, this risk taking could be viewed positively, a taking hold or reclaiming of their self-perceived problems and doing something about it, using ''an emerging cultural norm (such as GPs) rather than a stereotyped extreme behavior'' (Frederick & Bradley, 2000; Roberti & Storch, 2005, p. 14). One explanation purported is that piercings (and body art) help to relieve stress, release endorphins, and clarify the self. Bensen (2000) distinguishes ''self-mutilation as 'addictive' and beyond the control of self, in contrast to body art, performed with complete consciousness, considered for some length of time and often publicly witnessed'' (p. 249). These feelings are summarized well in this quote (Angel, 2009):

> I had been molested as a child so my genital area was something I looked at in shame. Today I am a new woman. I know now I was not responsible for what a sick man did to me. This piercing has freed me from the bonds of the molestation. I can look at my genitals with pride and joy. I am proud of who I am and the body I have. I look at my piercing every day and love it more and more. I didn't think a piercing could have this effect on me, but surprisingly it has. No amount of therapy could have healed me the way this piercing has—by taking ownership of my body and choosing to have a clitoral hood piercing—by a piercer who is loving, kind, and very knowledgeable. (p. 141)

Caution should be exercised in generalizing the presence of the depression, abuse, and forced sexual activity as this study survey only had a few questions on each topic area. Further research is encouraged about the presence and depth of these concepts; for example, depression could mean short-term sadness or an overwhelming despair. If there is a relationship, other questions could be, at what point do these events and psychological symptomologies motivate and/or occur in women with GPs?

The women with GPs reported few regrets but there were several instances when they seemed to question HCPs' response to them. Messages to that effect were documented several ways during this study. Women with GPs were strong in their final survey responses of ''GPs have given me strong feelings of empowerment,'' and ''they have increased my sexual and self-confidence.'' Further expressions of HCP impatience were written to the researchers during completion of the survey questions related to the physical activities and refusal of sex activities questions that addressed common myths and beliefs about women with GPs; they perceived this section of questions to be ''stupid,'' ''difficult to comprehend,'' when they consider their GPs as a normal, meaningful part of their life and an opportunity to feel more connected to their body. While some women with GPs mentioned HCPs who have become supportive, others still seemed to perceive HCPs as exercising an authoritative nature of ''knowing best'' in the health facility arena, rather than collaboratively striving for mutual decision making.

Implications for NPs

This triad of evidence provides further documentation about women with GPs, their human responses to GPs, and how they manage them in their everyday lives (Grace & Powers, 2009); they seemed to be trying to maximize their physical, mental, and social well-being. Three major areas for patient centered care seem to surface from this data: (a) being responsive to women with GPs, (b) collaborative decision making when removing jewelry, and the (c) promotion of applicable patient education.

Being responsive to women with GPs

For these women, GPs were not a fad, fashion, or rebellious act; they treat them as a normal, meaningful part of their lives and have expressed hope that HCPs would support this notion by our actions, our individual caring, and nonjudgmental communication. They took responsibility for their personal health and self-care and are now looking for facilitators and advocates to assist them with health promotion options (Blais et al., 2002). Exploring personal feelings is important. These women with GPs had deliberated for a long time before procuring a GP, and now it is a positive extension of themselves, a marker, a celebration, and/or a symbol of moving from victim to survivor. When HCPs demonstrated discomfort (i.e., lack of communication, nonverbal actions) in caring for women with GPs, these women were impacted, as evidenced in this study. An NP's acknowledgment of a GP demonstrates acceptance and caring and can lead to important conversations about potential problems which may have been ''mediated by past exposure to psychosocial stressors'' and ''unconscious discrimination.'' (Meyer, 2000; Roberti & Storch, 2005, p. 18; Williams, 2001; Young & Armstrong, 2008). Encouraging the woman with GPs with effective, applicable counseling in health promotion on health-related matters can have a positive, supportive role with their health beliefs, individual behaviors, and increased feelings of self-efficacy.

Collaborative decision making for removal of jewelry

''Being distracted by body piercings can delay more important medical care'' (DeBoer et al., 2006, p.159). NPs should work with the women with GPs on an individual basis, including them in the decision-making process, just as you would others having assistive devices as a normal part of life. Query yourself. When you have doubt regarding removal, consider the location of the piercing and the intended medical procedure. Is the rationale for removal evidence or traditionally based? ''The EBP assumption that effective clinical decision making incorporates patient values implies that HCPs will incorporate the unique personal circumstances of patients into their care'' (Grace & Powers, 2009, p. 30). The majority of procedures in this area (e.g., urinary catheterizations, vaginal examinations, and deliveries) can be performed without jewelry removal (Anderson et al., 2003; DeBoer et al., 2006; Young & Armstrong, 2008). No cases have been documented of medical complications with delivery (DeBoer et al., 2006). In this study, over half those pregnant with GPs did not remove their jewelry before delivery, with no complications to the infant or themselves. Asking them to remove the GP, even for a ''short time,'' produces realistic fears of site closure for women with GPs, especially with clitoral hood and labia majora piercings (Young & Armstrong, 2008). Additionally, cutting the jewelry can leave sharp edges which predispose them further to extensive tissue injury and infectious risks. Instead, secure the pierced area with gauze and tape, if necessary.

Talk to the women with GPs to explore concerns of intended medical procedures. If the piercing must be removed, the easiest option for HCPs or women with GPs is to insert a stent or retainer (suture, surgical grade cathether, or bendable polytetrafluoroethylene tubing), when in a gynecological examination position. Nathanson et al. (2006) suggest until this debate is resolved ''cautious monitoring,'' and a refrain from ''rushing to judgment'' about the (women with GPs) ''creative expressions'' (p.798) is encouraged.

Promotion of applicable patient education

Millner et al. (2005) ''found no reason to counsel against (the genital) piercings'' (p. 676). Women with GPs are no longer on the fringe of society, but are presenting frequently to more offices, clinics, and delivery rooms, yet we are still not a major resource for piercing care. Is it our knowledge deficit or judgmental perspectives? While women with GPs want factual information about GPs, they also want essential advice to assist their optimal level of wellness. Healthy decision making between NPs and women with GPs can lead to better body autonomy, prevention of adverse events, and effective interventions when health integrity is threatened (Caliendo et al., 2005). Applicable education includes a holistic plan of care, as well as how their actions influence health outcomes and their self-actualization. Further effective education for women with GPs can be obtained at:

1. Association of Professional piercers: http://www.safepiercing.org
2. Angel (2009).
3. Young & Armstrong (2008).
4. http://www.bmezine.com

These different informational components for NPs can enhance the health promotion and status of women with GPs and maximize the NP's ability to work with them.

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