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McLean, Merritt Steinauer, Jody Schmittdiel, Julie <u>et al.</u>

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Provider Self-Disclosure During Contraceptive Counseling

Merritt McLean^a, Jody Steinauer^b, Julie Schmittdiel^c, Pamela Chan^a, and Christine Dehlendorf^b

^aKaiser Permanente, 2425 Geary Boulevard, San Francisco, CA 94115, USA

^bUniversity California San Francisco, 1001 Potrero Avenue, San Francisco, CA 94110, USA

^cKaiser Permanente Division of Research, 2000 Broadway, Oakland, CA 94612, USA

Abstract

Objective(s)—Provider self-disclosure (PSD) – defined as providers making statements regarding personal information to patients – has not been well-characterized in the context of contraceptive counseling. In this study we describe the incidence, content and context of contraceptive PSD.

Study Design—This mixed methods analysis used data from the Provider-Patient Contraceptive Counseling study, for which 349 family planning patients were recruited from 2009 to 2012 from six clinics in the San Francisco Bay Area. Audio-recordings from their visits were analyzed for the presence or absence of PSD, and those visits with evidence of PSD were analyzed using qualitative methods. The associations of patient and provider demographics and patient satisfaction measures, obtained from survey data, with PSD were analyzed using bivariable and multivariable analyses.

Results—37% of providers showed evidence of PSD during at least one visit, and PSD occurred in 9% of clinic visits. 54% of PSD statements were about intrauterine devices. About half of PSD statements occurred prior to the final selection of the contraceptive method and appeared to influence the choice of method. In post-visit surveys, all patients who reported receiving PSD considered it to be appropriate, and patient-reported PSD was not statistically associated with measures of patient satisfaction.

Conclusion(s)—This study provides some support for the appropriateness of PSD during family planning encounters, at least as practiced during the sampled visits. Further research could explore whether this counseling strategy has an impact on patients' ability to identify the best contraceptive methods for them.

Keywords

contraceptive counseling; self-disclosure; intrauterine device; patient provider communication

Corresponding author: Merritt McLean, merritt.mclean@kp.org, Kaiser Permanente, 2425 Geary Boulevard, San Francisco, CA 94115, USA.

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Introduction

As half of pregnancies in the United States are unintended [1], helping women wanting to prevent pregnancy to use contraception through effective clinical counseling can have positive impacts for individuals and on public health. The quality of contraceptive counseling is associated with a woman's ability to use contraception correctly and consistently, but many specifics about the counseling interaction have yet to be thoroughly investigated [2–8].

Provider self-disclosure (PSD) – defined as providers making statements regarding personal information to patients – is one aspect of counseling that has recently received increased attention in the health care literature. Studies have found that this disclosure is a common occurrence during outpatient visits, occurring in 15–34% of primary care visits [9,10]. The impact and appropriateness of PSD is unclear, as it could be interpreted positively as a valuable tool to enhance a personal connection between the patient and the provider or negatively as a distraction from patient care or transgression of professional boundaries [11].

The frequency and nature of PSD in the setting of contraceptive counseling has not been well studied. Investigation of this type of communication and its appropriateness is particularly important in this area given the complex social context of contraceptive decision making. On one hand, as contraceptive counseling addresses profoundly personal issues related to sexuality and fertility, it has been suggested that there is value to intimacy in the provider-patient relationship, which would support the value of PSD [12,13]. Additionally, PSD might strengthen the legitimacy of information given by the provider, as studies have found that patients value information obtained through personal experiences of contraception [12,14,15]. On the other hand, the concern remains that PSD may be perceived as, or in fact be, inappropriate or even coercive [16].

The purpose of this study is to further our understanding of PSD about contraceptive use during contraceptive counseling, and explore its potential influence on patient perception of the visit. In this study we use both quantitative and qualitative methods to describe the incidence, content and context of PSD in a cohort of women receiving contraceptive counseling, as well as women's reactions to PSD.

2. Materials and Methods

2.1 Population

We used data from the Provider-Patient Contraceptive Counseling study, a direct observation study of provider-patient communication about contraception [17,18]. Briefly, we recruited 349 patients from 2009 to 2012 from six clinics in the San Francisco Bay Area if they wished to discuss contraception during their clinic visit. Eligibility requirements included being female; non-pregnant; English speaking; and self-identifying as being of white, black or Latina race/ethnicity (due to the original study being designed to observe disparities between these ethnic groups). Thirty-eight providers participated in the study.

The institutional review board at the University of California San Francisco approved of this study. All participants provided written consent.

2.2 Measures

After enrollment, participants completed a brief demographic survey in the waiting room. Visits with providers were then audio recorded. As 7 participants had audio recordings that were unusable due to technical issues, a total of 342 audio recordings were collected from these clinic visits. We transcribed the audio recordings in a HIPAA compliant manner. Study staff reviewed the transcripts using a standardized checklist that included evaluating for PSD, defined as provider statements that revealed personal information related to contraception. MM and CD then examined possible instances of PSD and reached consensus on ambiguous statements based on assessment of whether the patient would perceive the information as PSD.

After the visit, the patient completed another questionnaire, which included questions regarding her satisfaction with counseling. This included the question, "Did your provider share anything about his or her personal experience with birth control with you?" Those who responded positively were asked a follow up question, "Did you feel sharing this information was appropriate?" Similarly, a patient's satisfaction with the visit was assessed through questions about her satisfaction with the decision making process, with her method, and with her overall satisfaction. These questions had answers on a Likert scale from completely unsatisfied to completely satisfied. Since the responses were strongly skewed in a positive direction, we dichotomized them as completely satisfied or less than completely satisfied. Participants were also asked about whether they would recommend the provider to a friend or return to see the provider themselves.

2.3 Quantitative analysis

We used descriptive statistics to report demographic information for patient and providers. We performed bivariable and multivariable logistic analyses to assess for significant demographic differences between patients who did and did not receive PSD, and between providers who did and did not self-disclose. We used X² analyses and multivariable logistic regression to compare reported satisfaction levels between patients who were and were not disclosed to and whether they would recommend the provider or return to see the provider. We adjusted all multivariable logistic regression analyses for the theoretically important prespecified variables of patient age, patient race/ethnicity, provider age, provider race/ethnicity and provider degree (MD/DO vs. NP/PA). As no other variables were found to be significant in bivariable analysis at a p value of <0.05, only these variables were included. These analyses adjusted for clustering by provider using mixed effect logistic regression. We performed all analyses using STATA 12 (College Station, TX). P<0.05 was considered statistically significant.

2.4 Qualitative analysis

Each incident of PSD was coded using themes emerging from the data, as well as predefined themes based on a review of the literature, including the content and context of the PSD, consistent with a modified grounded theory approach [19]. We used a qualitative data

analysis software program (NVivo 9; QSR International, Doncaster, Australia) to assist with coding. MM and CD refined the coding structure through independent review of the transcripts and iterative group meetings. After the final consensus coding structure was developed, MM coded the remaining transcripts. CD coded a subset of 10 transcripts using the final coding structure to ensure consistency in coding.

3. Results

3.1 Association of PSD with patient and provider demographics

The patient population included in the study represented a range of ages, race/ethnicities and income levels (Table 1). The providers were primarily white (71%) and were certified as CNMs, NPs or PAs (76%). PSD about contraception occurred in 29 visits (9% of encounters) with a total of 46 separate statements about providers' contraceptive use. Twenty-four providers never self-disclosed (63%), 8 self-disclosed once (21%) and 6 self-disclosed multiple times (16%). White providers were more likely to self-disclose than non-white providers (Table 1, p=0.02 in multivariable analysis). The impact of provider gender could not be determined as there was only one participating male provider. In bivariable analysis patients in the oldest age category of those 35 and older had a nominally statistically increased likelihood of receiving self-disclosure than those less than 20 (Table 1, p=0.04 for those <20 compared to those 35 and older in multivariable analysis).

3.2 Content of PSD

Intrauterine devices (IUDs) were the contraceptive method about which providers selfdisclosed most often, in just over half of these encounters (n=15). When the type of IUD was specified, it was most often the levonorgesterol IUD (LNG-IUD) (6 encounters), with the copper IUD being mentioned specifically only once. Oral contraceptive pills and condoms were mentioned in 5 encounters each, and the etonogestrel/ethinyl estradiol vaginal ring in 4. The cervical cap and diaphragm were each mentioned in 2 encounters, and the contraceptive injection, contraceptive patch, contraceptive sponge and male and female sterilization each mentioned in one encounter. PSD statements fell into one of three categories: personal use of contraception (63%), contraceptive use by family members or friends (14%), and personal preferences for method characteristics (23%).

When speaking about their own use of contraception or use by family members or friends, statements clustered around a few subjects. Providers tended to speak about their experience with the non-contraceptive benefits of contraception, such as this provider speaking about the decrease in menstrual bleeding expected with the LNG-IUD: "*I wanted [the Mirena] to reduce my suffering from my menstrual period*." They also spoke about the side effects of hormonal contraception, such as perceived mood changes with the ring (e.g. "*I tried the ring for one month. It made me psycho*.") Finally, they spoke about logistics of method use, such as how to use barrier methods or how to remember when to take a pill.

In contrast, PSD about personal preferences exposed the values held by providers regarding contraception instead of direct experience. Often these values related to the non-

contraceptive benefits of contraception, such as this provider talking about why she prefers LNG-IUD induced amenorrhea: "*people like me really want to be free of the pain and suffering of their menstrual cycle.*" A different provider described her priorities, again in support of IUDs: "*Which is better - a chemical or a small foreign object?* … *I personally would rather have the foreign object 'cause there's no chemicals in it. It's not for an entire whole bloodstream. It just sits in your uterus.*" In these instances, providers seemed to be taking preemptive stances in opposition to many of the commonly voiced objections to contraception, such as that it's healthier to have frequent periods or that having something inside the uterus is dangerous [20].

3.3 Context of PSD

PSD statements were primarily short supporting statements, consisting of 1–2 sentences embedded in longer explanations. They were usually directly related to a clinical issue, either through responding to a patient's question, agreeing with a patient or contributing to the clinical conversation. A typical statement was this response to a patient's concern about pain during the IUD insertion, "*I'm not worried about you. I've had this twice. The anticipation is the worst part.*" Although most providers spoke about their experiences in the singular, two providers used the less personal plural: "[inserting the vaginal ring] is not that hard, especially for us that have used diaphragms." In three encounters the clinicians engaged in longer discussions about their experiences with contraception, twice due to the patient asking follow-up questions. In only one instance did it appear that PSD was disruptive to the flow of the clinical encounter, in that the provider talked at length about her own IUD without any apparent relevance to the patient.

In 14 of the 29 encounters that included PSD, PSD occurred prior to the patient deciding on a contraceptive method. Twelve of these statements appeared to influence the patient's decision. In most instances (11/12) that influence appeared to be exerted through sharing something positive about the method, such as the simplicity of using the ring or the menstrual benefits of using the LNG-IUD. In this context, the purpose of PSD often appeared to be directly promoting a method (e.g. "If I was your age, I would have gotten [the LNG-IUD]' or "a lot of us use the IUD because we know how effective it is"). Some providers used PSD to reinforce a medical recommendation through the credibility of personal experience, such as when a provider contrasted the ease of diaphragm use with the difficulty of cervical cap use based on her experiences of both. The IUD was the method most commonly promoted by PSD statements (n=7), followed by the ring (n=3), and others (OCPs, patch, cervical cap, diaphragm, tubal ligation, vasectomy, and condoms). In one instance, PSD focused on a negative aspect of contraception - the medical risks associated with combined OCPs - and was used to persuade a patient against her preferred method. Two instances of PSD appeared irrelevant to the patient's final contraception choice. In one, the provider shared her trick for remembering when to change the patch, but the patient chose the ring. In another, the provider responded to a question about vaginal discharge with the ring by revealing that she had participated a trial studying the ring, but the patient chose the diaphragm.

In the 16 encounters in which statements occurred after the patient had chosen a method (including one in which the PSD occurred both before and after the decision), PSD seemed to reinforce the decision. Some providers seemed to use PSD as a means to increase their credibility, such as when the provider told the patient requesting a cervical cap that it may be old fashioned but that she has friends who use it. More often in this context, however, PSD appears to be intended to reassure the patient about an issue related to contraception. For example, to reassure a patient who expressed doubts about choosing OCPs over the contraceptive injection due to concern about weight gain, one provider shared "*If I have a choice of taking something that I would maybe gain weight, I would probably say no to it.*" In the five encounters containing PSD in which the patient had come in expressly to have an IUD inserted, PSD all consisted of the provider sharing her own experience of having an IUD placed, seemingly to reassure the patient about the experience, such as this provider: "*It's quick, which is nice. I've had this done twice myself. I'm an IUD putter-inner and I'm a club member.*"

3.4 Effect of PSD

In all cases, based on subsequent communication between the provider and the patient, PSD appeared to have a positive effect on the patient encounter, through allowing the provider to connect with a patient through a shared experience or to illustrate a medical concept through a personal story. Often shared personal experiences lightened the tone of the encounter, especially when providers revealed having had similar negative or awkward experiences with contraception in the past, as illustrated by this exchange:

Patient: I used the sponge when I was younger, but I don't think they make those anymore do they?

Clinician: I remember those all too well. What a joke! It was like having soap in your vagina.

Patient: Yeah, it was like having a milkshake going on down there! [Both laugh.]

There were no instances where the patient had a noticeably negative response to PSD.

When surveyed immediately following the encounter, 18 of the 29 patients who had a provider self-disclose reported having experienced any PSD. All felt that it was appropriate, with 86% rating it as completely appropriate and 14% as somewhat appropriate.

In quantitative analysis using the whole sample, PSD did not have a statistically significant association with measures of patient satisfaction with the clinical encounter (Table 2).

4. Discussion

We found that although a significant number of providers self-disclosed (37% of providers in this sample), the chance of a patient experiencing PSD was relatively low, at 9% of family planning encounters. This is lower than expected based on research in other contexts, such as primary care and surgical consultations [21], which may be related to the sensitive nature of contraceptive counseling and providers therefore being more cautious when providing

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care. Patients 35 years of age and older were more like to experience PSD, compared with the youngest patients, and white providers were more likely to disclose than were non-white providers. PSD statements were generally non-disruptive and were perceived positively by patients. PSD occurring prior to method selection appeared to have an influence on method selection.

The lack of negative reactions to PSD, determined both from recordings of the visits and surveys of patients, provides reassurance that this communication technique may be appropriate in the context of family planning care. This is consistent with previous research showing that patients desire an intimate relationship with their family planning providers, which may be promoted using PSD [11,21]. Of note, the fact that PSD observed in our study was almost exclusively short statements that did not substantially alter the flow of the conversation may contribute to this finding, and may not generalize to more lengthy or involved forms of PSD. Importantly, our findings do not provide evidence regarding whether PSD was in fact helpful to patients. As PSD opens the possibility for influencing selection or use of contraception based on anecdotal experience, it is important that providers are selective about the personal information shared so that it is consistent with evidence-based medicine.

The finding that IUDs were the method about which providers most frequently disclosed is consistent with a growing enthusiasm for these methods among medical professionals [22], as well as the fact that family planning providers are more likely to use IUDs than the general population [23]. Given documented misconceptions among women about this method [20], as well as the fact that women value information from those with real world experience using the method [24], PSD may encourage more women to consider this method, a finding which is consistent with a previous study that found that PSD about IUDs was associated with choice of that method [25]. Given the unknown effect of PSD on the quality of decision making, however, and evidence that pressure to use a long-acting method is associated with discontinuation [26], providers may wish to be particularly cautious when disclosing about this method.

The suggestion in our data that older age of the patient may be associated with PSD could be related to greater similarity in ages between providers and patients, and perhaps decreased concern about PSD being perceived as coercive. The differences by race/ethnicity of the provider may reflect cultural or normative differences in expectations of communication and the provider-patient relationship, although there is no research on differences in communication by provider race/ethnicity on which to derive more specific hypotheses.

Weaknesses of the study include the small number of encounters that included PSD, which limited our ability to explore statistical associations between patient and provider demographics, and between patient satisfaction and PSD. Specifically, our findings suggest the possibility of a difference in frequency of PSD between MDs/DOs and other providers, but we did not have the statistical power to adequately address this question. In addition, the small geographic area from which visits were sampled may limit generalizability of our findings.

In conclusion, while there are concerns about the use of PSD by providers in medical encounters, and these concerns may be augmented in the family planning setting due to the sensitive and intimate nature of the discussion, this study provides some support for the appropriateness of PSD during family planning encounters, at least as practiced during the sampled visits. Further research could explore whether this counseling strategy has an impact on the development of therapeutic relationships and on patients' ability to identify the best contraceptive methods for them.

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References

- 1. Finer LB, Zolna MR. Unintended pregnancy in the United States: incidence and disparities, 2006. Contraception. 2011; 84:478–485. [PubMed: 22018121]
- Upson K, Reed SD, Prager SW, Schiff MA. Factors associated with contraceptive nonuse among US women ages 35–44 years at risk of unwanted pregnancy. Contraception. 2010; 81:427–434. [PubMed: 20399950]
- Rosenberg MJ, Waugh MS, Burnhill MS. Compliance, counseling and satisfaction with oral contraceptives: a prospective evaluation. Fam Plann Perspect. 1998; 30:89–92. 104. [PubMed: 9561874]
- 4. Forrest J, Frost J. The family planning attitudes and experiences of low-income women. Fam Plann Perspect. 1996:246–256. [PubMed: 8959414]
- RamaRao S, Lacuesta M, Costello M, Pangolibay B, Jones H. The link between quality of care and contraceptive use. Int Fam Plan Perspect. 2003; 29:76–83. [PubMed: 12783771]
- Moos MK, Bartholomew NE, Lohr KN. Counseling in the clinical setting to prevent unintended pregnancy: an evidence-based research agenda. Contraception. 2003; 67:115–132. [PubMed: 12586322]
- 7. Halpern V, Lm L, Da G, Mf G. Strategies to improve adherence and acceptability of hormonal methods of contraception (Review). Cochrane Database Syst Rev. 2011
- J DCHJVEGKLKSJLJSD steinaur. Association of the Quality of Interpersonal Care During Family Planning Counseling with Contraceptive. Use. TT- Am J Obstet Gynecol. 2016:e1–e9. doi:http:// dx.doi.org/10.1016/j.ajog.2016.01.173.
- Beach MC, Roter D, Larson S, Levinson W, Ford DE, Frankel R. What do physicians tell patients about themselves? A qualitative analysis of physician self-disclosure. J Gen Intern Med. 2004; 19:911–916. [PubMed: 15333054]
- McDaniel SH, Beckman HB, Morse DS, Silberman J, Seaburn DB, Epstein RM. Physician selfdisclosure in primary care visits: enough about you, what about me? Arch Intern Med. 2007; 167:1321–1326. [PubMed: 17592107]
- Rousseau PC. Physician self-disclosure at the end of life: is it beneficial? J Palliat Med. 2009; 12:993–994. [PubMed: 19921999]
- Dehlendorf C, Levy K, Kelley A, Grumbach K, Steinauer J. Women's preferences for contraceptive counseling and decision making. Contraception. 2013; 88:250–256. [PubMed: 23177265]

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- Brown MK, Auerswald C, Eyre SL, Deardorff J, Dehlendorf C. Identifying counseling needs of nulliparous adolescent intrauterine contraceptive users: a qualitative approach. J Adolesc Health. 2013; 52:293–300. [PubMed: 23299012]
- 14. Lowe P. Embodied expertise: women's perceptions of the contraception consultation. Heal An Interdiscip J Soc Study Heal Illn Med. 2005; 9:361.
- 15. Yee L, Simon M. Urban minority women's perceptions of and preferences for postpartum contraceptive counseling. J Midwifery Womens Heal. 2011; 56:54–60.
- 16. Stern AM. Sterilized in the name of public health: race, immigration, and reproductive control in modern California. Am J Public Health. 2005; 95:1128–1138. [PubMed: 15983269]
- Minnis AM, Mavedzenge SN, Luecke E, Dehlendorf C. Provider Counseling to Young Women Seeking Family Planning Services. Perspect Sex Reprod Health. 2014
- Levy K, Minnis AM, Lahiff M, Schmittdiel J, Dehlendorf C. Bringing patients' social context into the examination room: an investigation of the discussion of social influence during contraceptive counseling. Womens Health Issues. 25:13–21.
- 19. Charmaz K. Constructing Grounded Theory: A Practical Guide through Qualitative Analysis. n.d.
- Craig AD, Dehlendorf C, Borrero S, Harper CC, Rocca CH. Exploring young adults' contraceptive knowledge and attitudes: disparities by race/ethnicity and age. Womens Health Issues. 24:e281– e289. [PubMed: 24725755]
- Beach MC, Roter D, Rubin H, Frankel R, Levinson W, Ford DE. Is physician self-disclosure related to patient evaluation of office visits? J Gen Intern Med. 2004; 19:905–910. [PubMed: 15333053]
- MacIsaac L, Espey E. Intrauterine contraception: the pendulum swings back. Obstet Gynecol Clin North Am. 2007; 34:91–111. ix. [PubMed: 17472867]
- 23. Stern LF, Simons HR, Kohn JE, Debevec EJ, Morfesis JM, Patel AA. Differences in contraceptive use between family planning providers and the U.S. population: results of a nationwide survey. Contraception. 2015; 91:464–469. [PubMed: 25722074]
- Anderson N, Steinauer J, Valente T, Koblentz J, Dehlendorf C. Women's social communication about IUDs: a qualitative analysis. Perspect Sex Reprod Health. 2014; 46:141–148. [PubMed: 24894575]
- 25. Benson LS, Perrucci A, Drey Ea, Steinauer JE. Effect of shared contraceptive experiences on IUD use at an urban abortion clinic. Contraception. 2012; 85:198–203. [PubMed: 22067784]
- Kalmuss D, Davidson AR, Cushman LF, Heartwell S, Rulin M. Determinants of early implant discontinuation among low-income women. Fam Plann Perspect. 28:256–260.

Implications

In this study, provider self-disclosure (PSD) did not have a demonstrated negative effect on the provider-patient relationship. In almost half of visits, PSD appeared to influence patients' choice of a method; whether this influence is beneficial needs further research.

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Participant characteristics and association of demographics with provider self-disclosure (PSD) during visit

		n (%)	n (%)	n (%)	p value	p value $\hat{\tau}$
Patients		342 (100)	313 (92)	29 (9)		
Age	<20	41 (12)	37 (90)	4 (10)	ref	ref
	20–24	115 (34)	108(94)	7 (7)	0.44	0.89
	25–29	88 (26)	80 (91)	8 (9)	0.90	0.13
	30–34	41 (12)	38 (93)	3 (7)	0.69	0.37
	35+	57 (17)	50 (88)	7 (12)	0.70	0.04
Race/Ethnicity	White	158 (46)	148 (94)	10 (6)	ref	ref
	African American	98 (29)	87 (89)	11 (11)	0.17	0.87
	Latina	86 (25)	78 (91)	8 (9)	0.40	0.35
Parity	0	230 (67)	212 (92)	18 (8)	ref	
	1+	112 (33)	101 (90)	11 (10)	0.54	
Federal poverty level	<100%	145 (42)	127 (88)	18 (12)	ref	
	100-200%	71 (21)	68 (96)	3 (4)	0.07	
	>200%	126 (37)	118 (94)	8 (6)	0.10	
Parental education *	High school or less	126 (37)	116 (92)	10 (8)	ref	
	Some college	87 (26)	82 (94)	5 (6)	0.54	
	College or more	128 (37)	114 (89)	14 (11)	0.42	
Provider ^{**}						
Age	<46	127 (37)	121 (95)	6 (5)	ref	ref
	46–55	124 (36)	108 (87)	16 (13)	0.03	0.63
	>55	91 (27)	84 (92)	7 (8)	0.37	0.77
Race/Ethnicity	White	244 (71)	216 (89)	28 (12)	ref	Ref
	Other	98 (29)	(66) 26	1 (1)	0.02	0.02

		Total n (%)	No PSD n (%)	No PSD PSD n (%) n (%)	Bivariable p value	Bivariable Multivariable p value p value [†]
Degree	NP, CNM, PA	260 (76)	260 (76) 234 (90) 26 (10) ref	26 (10)	ref	Ref
	MD, DO	82 (24)	82 (24) 79 (96) 3 (4) 0.09	3 (4)	0.09	0.28
* One patient refuse	* One patient refused to answer parent education question so adds to 341.	ation question so	o adds to 341			
** Provider demogr:	Provider demographics reflect traits of 38 moviders across the 342 visits	s providers acro	ss the 342 vi	sits		

 \vec{r}^{t} Controlling for all variables in the model and provider as a random effect

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Table 2

Association of patient satisfaction with provider self-disclosure (PSD) during visit*

	No PSD n=311	PSD n=29
Completely satisfied with the process	52.7%	65.5%
Completely satisfied with the method chosen	25.5%	17.2%
Completely satisfied overall	75.2%	79.3%
Would recommend provider	81.3%	86.2%
Would return to provider	81.1%	89.3%

* Two participants did not complete post-visit surveys so total is 340. No significant differences were identified with bivariable or multivariable analysis.