

Religious Affiliation, Religiosity, and Spirituality in Pediatric Residents: Effects on Communication and Self-Efficacy with Adolescents in a Clinical Setting

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Abstract Religion and spirituality are known influences on medical providers' care of patients, but no studies have assessed resident beliefs related to patient perception of clinical care. The main objective of our study was to assess resident religious affiliation, religiosity, and spirituality in relation to self-efficacy and communication with patients during adolescent clinic visits. We found that religious affiliation and religiosity appear to affect patient perception of communication with residents during adolescent visits; spirituality had little noted effect. Further research is warranted, especially regarding resident and patient gender correlations and differences in religious affiliation effects on patient perception of care.

Keywords Religiosity · Religious affiliation · Spirituality · Communication

Introduction

As a relatively new subspecialty in pediatrics, adolescent medicine is often limited to only one month of a three-year pediatric residency with only five percent of residency programs exceeding that number (Fox et al. 2008). Barriers commonly cited during residency in caring for adolescents—time commitment and lack of training—both decrease medical professionals' confidence in adolescent health care and prevent any continuity of care with their adolescent patients (Kershner 2009). In addition, studies show that practicing general pediatricians also do not feel confident in diagnosing and managing adolescents largely because they do not possess adequate knowledge of the specialty from their training (Fox et al. 2008). Historical findings suggest that physicians do not obtain a thorough history

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from their patients preventing risk assessment and counseling which are important factors in affecting patient behaviors (Wimberly et al. 2006).

As part of providing better care to adolescents, pediatricians and pediatric residents must become comfortable in all areas of adolescent health (Kaul et al. 2014). Efforts to improve knowledge and skills in the provision of clinical preventive services to adolescents through adequate training and education have been implicated as crucial in aiding and addressing some prominent public health problems, including substance abuse, sexually transmitted diseases, unplanned pregnancies, and obesity (Fox et al. 2010). Resident self-efficacy becomes an essential component in realization of these goals for improved patient care.

Self-efficacy is an individual's perception of his/her ability to organize and to perform specific tasks or activities, and has been found to be a predictor of subsequent behavior (Bandura 1997). As individuals tend to participate in activities in which they are more likely to succeed, self-efficacy is a good predictor of behavior (Buckelew et al. 2008). Pediatricians' level of efficacy regarding provision of preventative health care for adolescents has been found to predict whether they will provide these services (Ambresin et al. 2013; Lindberg et al. 2009; Ozer et al. 2004), and training in the delivery of adolescent preventive services is effective in increasing provider self-efficacy with regard to screening and counseling adolescents about risky behaviors (Buckelew et al. 2008).

In addition to knowledge and self-efficacy, religiosity and spirituality are two components shown in previous research to play a role in health of patients (Berg et al. 2013; Lawrence et al. 2013; Bjarnason 2012). The characteristics of both entities are often difficult to capture. While religiosity centers on belief in a higher power and participation in an organized institution or community, spirituality is as varied in definition as it is in expression (Purow et al. 2011). Although separate constructs, both religiosity and spirituality have been previously linked to psychological well-being (Ivtzan et al. 2013). Curlin et al. (2005) surveyed 2000 practicing physicians where 55% stated that religious beliefs influence their practice of medicine, 58% reported that religious beliefs were carried into all aspects of their lives, and 20% expressed they were spiritual, but not religious. A second study of pediatrician faculty resulted in similar numbers with 59% reporting that religious beliefs influenced interactions with patients; only 67% positively reported a religious identification compared to 84% of the public (Catlin et al. 2008). In a more focused survey of pediatric oncology faculty from 13 US News and World Report 'Honor Roll' hospitals, 53% believed their spiritual or religious beliefs influenced interactions with patients. These physicians described themselves as spiritual in 85% of instances, but only believed in God without doubts 27% of the time, whereas the public answered this question positively on 60% of occasions (Ecklund et al. 2007).

Studies centering on resident religiosity and spirituality are rare. A 2005 study which collected data from residents in areas of internal medicine, pediatrics, and family medicine showed that 46% of providers surveyed felt they should play a role in their patients' religious and spiritual lives. Such feelings were associated with residents who attended organized religious activities, had a higher level of personal spirituality, were older in age, and with worsening patient medical condition (Luckhaupt et al. 2005). Although studies have previously looked at provider views on introducing religion and spirituality into patient care (Voltmer et al. 2014; Donohue et al. 2010), no studies have integrated assessment of trainee views in direct comparison to patient perception of the care they have received in a clinical setting. Additionally, previous studies have evaluated self-efficacy of residents (Woods et al. 2012), but none have investigated self-efficacy as it relates to perception of communication skills during their adolescent medicine rotation in a clinical

setting with patients. Our study is innovative as it will allow evaluation of resident religiosity, spirituality, and self-efficacy during their one-month adolescent medicine rotation while assessing potential correlations with communication skill level and perceived communication with adolescent patients over a one-month period. The specific objectives of our study were (1) to determine resident religious affiliation, religiosity, spirituality, and self-efficacy at the beginning of a one-month adolescent medicine rotation, (2) to assess patient perceptions of resident communication skills during adolescent clinic visits, (3) to evaluate for any associations between resident religious affiliation, religiosity, and spirituality with self-efficacy and/or communication skill level with patients, and (4) to measure for change in communication skill levels and self-efficacy over the one-month rotation in adolescent medicine.

Methods

Study Design and Overview

This is a short-term longitudinal study to collect and to analyze data from the adolescent medicine pediatric resident rotation from August 2013 through August 2014 in an urban children's hospital setting. Two to six pediatric residents rotated through the clinic each month, and their religious affiliation, religiosity, spirituality, and self-efficacy were assessed at the beginning of the rotation using established tools previously utilized with adolescent and young adult patients. Patients seen by residents in the adolescent clinic evaluated the resident's communication skills at the end of the visit for a maximum of 20 encounters per resident allocated throughout the one-month rotation. The communication questionnaire was adapted from an established tool developed by the American Board of Internal Medicine (ABIM) Continuous Professional Development Program, and has been utilized extensively in previous learning situations and previously by this author (Woods et al. 2012). The instrument contains twelve items rating patient satisfaction with the pediatric resident (5-item Likert scale ranging from poor to excellent).

Participants and Setting

Pediatric residents completing their adolescent medicine rotation from August 2013 through August 2014 and patients seen by these residents in adolescent clinic were included in the study. Waivers of documentation of consent were granted for both pediatric residents and patients in the study by the institutions' IRB during approval of the study. Information sheets were provided to all participating residents at the beginning of the study and adolescent subjects when they were approached for participation in the study at the end of their clinic visits. Subjects provided consent to participate in the study by completing study questionnaires. Study investigators also requested waiver of parental permission as adolescent clinic encounters are often confidential in nature, and this waiver did not affect the rights of the adolescent as they could assent for health care in this situation. Potential subjects were informed of the research study and what part(s) was different from their clinical care. The volunteer nature of the study was emphasized, and subjects were informed that participation was voluntary and could be stopped at any time without negative consequence toward clinical care or breach of confidentiality. This study was approved by the Institutional Review Board of Cincinnati Children's Hospital.

Data Collection Procedures

The data were collected from pediatric residents completing their one-month adolescent medicine rotation and patients seen by the residents throughout their rotation. On rotation day one, residents ($n = 46$) provided demographic, self-efficacy, religiosity, and spirituality information. Resident also completed assessments of self-efficacy two weeks into the rotation and at the end of the rotation.

Patients ($n = 364$) seen by the pediatric residents were also asked to complete a 12-item communication tool adapted from the ABIM and edited by the PULSE (Pediatric Understanding and Learning through Pediatric Simulation Education) center at Arkansas Children's Hospital. Information of age, sex, and reason for visit (physical, gynecology, contraception, STI, sick, injury, mental health, other, multiple reason visits) was also collected from the patient.

Residents were assigned a unique identifier, so they could be linked to patients they saw and treated in clinic. Patient subjects were not identified by personal identifiers at any point in the study, and no subjects were contacted any time post-questionnaire.

Measures

Predictor Variables

Predictor variables included resident demographic characteristics (age [years], sex [male/female], race [African-American, Asian, Caucasian, Hispanic, Pacific Islander, Native American, Other], year of training [training year 1–4], and religious affiliation [Christianity, Hinduism, Islam, Judaism, none, other], as well as religiosity and spirituality. Religiosity was assessed using the Duke University Religion Index, which contains five items with questions regarding church/meeting attendance, prayer/meditation, religious belief effect on daily life, experiencing the Divine, and bringing beliefs into all aspects of life (Koenig and Bussing 2010). As spirituality is often difficult to fully assess, the spirituality tool used in our study addresses one aspect, sanctification of the body, which is often considered relevant to health care (Grossoehme et al. 2009). Sanctification of the body is defined as viewing the body as a sacred responsibility or viewing the body as having sacred qualities. Residents completed the 10-item Sanctification of the Body questionnaire with questions regarding their body being blessed, sacred, holy, miraculous, spiritual, heavenly, religious, divine, hallowed, and spirit-filled (Grossoehme et al. 2009).

Religiosity and spirituality served as predictor variables. Finally, self-efficacy was measured using a 21-item self-efficacy tool, previously developed by the first author (Woods et al. 2012).

Outcome Variables

The outcome variables were communication level with patients, as assessed for each key area (introduction, confidentiality, confidence, respect, attitude, interest in patient, not bored, eye contact, terminology, explanations, questions, and listening). Communication in each area was assessed at Time 1 (days 1–10), Time 2 (days 11–20), and Time 3 (days 21–30+).

Analysis

GEE logistic and linear regression was used to adjust for multiple observations involving the same resident with different patients. All predictor variables were used in the initial model with subsequent models to stratify for patient age, resident and patient gender, and visit type (SPSS, v. 23.0; all $p < .05$).

Results

Descriptive Statistics: Residents

Forty-six residents were recruited to participate in the study during their one-month adolescent medicine rotation; no residents declined to participate. Of the residents recruited, 28 (60.9%) were female and 18 (39.1%) were male (Table 1). Over 80% ($n = 37$) of residents were 26–30 years old, and over 70% ($n = 33$) were in their second year of residency. Thirty-one (67.4%) of the residents were Caucasian, 13% ($n = 6$) were African-American, and 10.9% ($n = 5$) were Asian. Thirty-two percent ($n = 15$) of residents described their religious affiliation as Christianity (Catholic), 26.1% ($n = 12$) had no

Table 1 Resident demographics

	<i>N</i>	Total %
Sex		
Male	18	39.1
Female	28	60.9
Age (years)		
26–30	37	80.4
31–35	7	15.2
35–40	1	2.2
> 40	1	2.2
Race/ethnicity		
African-American	6	13.0
Caucasian	31	67.4
Hispanic	2	4.3
Asian	5	10.9
Other	2	4.3
Year of training		
PGY1	3	6.5
PGY2	33	71.7
PGY3	10	21.7
Religious affiliation		
Christianity, Catholic	15	32
Christianity, Protestant	11	23.9
Hinduism	2	4.3
Islam	2	4.3
Judaism	1	2.2
No religious affiliation	12	26.1
Other	3	6.5

religious affiliation, 23.9% ($n = 11$) claimed their affiliation as Christianity (Protestant), 6.5% ($n = 3$) described their affiliation as ‘other’, 4.3% described their religious affiliation as Hinduism or Islam ($n = 2$ for each group), and 2.2% ($n = 1$) described their affiliation as Judaism.

Seventeen residents (36.9%) reported attending religious services a few times a year, while 6.5% ($n = 3$) reported attending services more than once a week and nearly 20% ($n = 9$) reported never attending religious services (Table 2). Nearly 60% of residents ($n = 27$) reported rarely or never praying; only 9 residents (19.5%) reported praying daily or more than once a day. Asked whether they experienced the Divine (i.e., God) in their lives, ten residents (21.7%) said this was definitely not true of them and ten (21.7%) residents said this was definitely true. Over 25% ($n = 12$) of residents felt that their religious beliefs tend to affect their approach to life, and over 20% ($n = 10$) felt this was definitely true. In contrast, ten residents (21.7%) felt this was definitely not true of their

Table 2 Resident religiosity

Attend	<i>N</i>	%
> Once/week	3	6.5
Once/week	4	8.7
Few times/month	5	10.9
Few times/year	17	36.9
Once/year or less	8	17.4
Never	9	19.6
Prayer		
> Once/day	2	4.3
Daily	7	15.2
≥ 2 times/week	4	8.7
Once/week	2	4.3
Few times/month	4	8.7
Rarely/never	27	58.7
Divine		
Definitely true	10	21.7
Tends to be true	12	26.1
Unsure	8	17.4
Tends not to be true	6	13
Definitely not true	10	21.7
Beliefs		
Definitely true	11	23.9
Tends to be true	4	8.7
Unsure	5	10.9
Tends not to be true	10	21.7
Definitely not true	16	34.8
Life		
Definitely true	7	15.2
Tends to be true	5	10.9
Unsure	6	13
Tends not to be true	10	21.7
Definitely not true	18	39.1

life. Finally, residents were asked if they tried hard to carry their religion into daily life, and nearly 35% ($n = 16$) said this was definitely not true and over 20% ($n = 10$) said this tends not to be true. Eleven residents (23.9%) said this was definitely true of their approach to life.

Regarding spirituality, residents completed a 10-item sanctification of the body questionnaire which asked how each term used applied to their own body. For all ten questions, most residents felt none of the terms applied to them at all (Table 3). Fifty percent ($n = 23$) of residents felt that ‘Divine’ did not apply at all, and nearly 50% of residents felt that ‘heavenly’ ($n = 22$), ‘holy’ ($n = 22$), and ‘hallowed’ ($n = 21$) also did not apply to them (Table 3). The highest response rates for a term applying completely to their body were for ‘blessed’ ($n = 7$, 15.2%) and ‘miraculous,’ ‘spiritual,’ and ‘spirit-filled’ all with six responses (13%).

Descriptive Statistics: Patients

Patients ($n = 364$) were recruited during visits with residents rotating through the adolescent medicine clinic. Patients ranged in age from 12 years to older than 21 years, and the highest numbers of patients were represented by the 17-year-old ($n = 72$, 19.8%) and 18-year-old ($n = 62$, 17%) age groups (Table 4). Females patients were seen more frequently by the residents during the study recruitment ($n = 270$, 76.9%), and most patients were African-American ($n = 279$, 76.6%). Patients were asked the reason for their visit and could choose more than one answer. Most patients ($n = 218$, 59.9%) stated they were

Table 3 Resident spirituality

	1 does not apply	2	3	4 somewhat applies	5	6	7 applies strongly
Blessed	28.3% ($n = 13$)	13% ($n = 6$)	2.2% ($n = 1$)	17.4% ($n = 8$)	10.9% ($n = 5$)	13% ($n = 6$)	15.2% ($n = 7$)
Sacred	32.6% ($n = 15$)	8.7% ($n = 4$)	8.7% ($n = 4$)	19.6% ($n = 9$)	17.4% ($n = 8$)	6.5% ($n = 3$)	6.5% ($n = 3$)
Holy	47.8% ($n = 22$)	13% ($n = 6$)	8.7% ($n = 4$)	15.2% ($n = 7$)	4.3% ($n = 2$)	4.3% ($n = 2$)	6.5% ($n = 3$)
Miraculous	28.3% ($n = 13$)	13% ($n = 6$)	4.3% ($n = 2$)	21.7% ($n = 10$)	10.9% ($n = 5$)	8.7% ($n = 4$)	13% ($n = 6$)
Spiritual	21.7% ($n = 10$)	19.6% ($n = 9$)	4.3% ($n = 2$)	13% ($n = 6$)	13% ($n = 6$)	15.2% ($n = 7$)	13% ($n = 6$)
Heavenly	47.8% ($n = 22$)	21.7% ($n = 10$)	10.9% ($n = 5$)	10.9% ($n = 5$)	8.7% ($n = 4$)	0% ($n = 0$)	0% ($n = 0$)
Religious	41.3% ($n = 19$)	17.4% ($n = 8$)	10.9% ($n = 5$)	17.4% ($n = 8$)	4.3% ($n = 2$)	6.5% ($n = 3$)	2.2% ($n = 1$)
Divine	47.8% ($n = 22$)	17.4% ($n = 8$)	13% ($n = 6$)	17.4% ($n = 8$)	2.2% ($n = 1$)	0% ($n = 0$)	0% ($n = 0$)
Hallowed	45.7% ($n = 21$)	19.6% ($n = 9$)	8.7% ($n = 4$)	21.7% ($n = 10$)	2.2% ($n = 1$)	0% ($n = 0$)	0% ($n = 0$)
Spirit-filled	28.3% ($n = 13$)	8.7% ($n = 4$)	10.9% ($n = 5$)	15.2% ($n = 7$)	6.5% ($n = 3$)	17.4% ($n = 8$)	13% ($n = 6$)

Table 4 Patient demographics

Sex	<i>N</i>	Total %
Male	84	23.1
Female	280	76.9
Age (years)		
12	6	1.6
13	16	4.4
14	22	6.0
15	52	14.3
16	49	13.5
17	72	19.8
18	62	17.0
19	36	9.9
20	35	9.6
21	11	3.0
> 21	13	3.6
Race/ethnicity		
African-American	279	76.6
Caucasian	63	17.3
Hispanic	3	0.8
Other	19	5.2
Reason for visit		
Annual check up	218	59.9
Gynecology visit	10	2.7
Contraception	35	9.6
STI check	27	7.4
Illness	44	12.1
Injury	19	5.2
Mental health issues	15	4.1
Chronic issues	4	1.1
Confidential visit	31	8.5

in clinic for an annual check up, while approximately 12% ($n = 44$) reported needing a visit for illness, nearly 10% ($n = 35$) came to discuss contraception, and over 8% ($n = 31$) had a confidential visit.

Self-Efficacy

Utilizing multi-level modeling, resident self-efficacy for older residents (ages 31–35) was higher than for residents younger than 25 years [$Z = 4.56$ (CI 1.05, 8.07), $p < .01$]. Also, Protestant residents had a lower self-efficacy than Catholic residents [$Z = -6.03$ (CI $-8.97, -3.10$), $p = 0$]. Self-efficacy at the middle [$Z = 6.27$ (CI 4.44, 8.09), $p = 0$] and end of the rotation [$Z = 9.93$, (CI 8.08, 11.78), $p = 0$] was higher than at the beginning of the rotation. Resident year of training, gender, race/ethnicity did not affect self-efficacy.

Communication

In the full model with all the predictor variables, resident characteristics did not impact communication with patients seen in adolescent medicine clinic. The patient visit type also had no effect on communication in the full model. However, female residents paired with male patients had greater communication than male residents with male patients for all visit types $\{Z = 2.03, (CI .01, .45), p < .04\}$.

Model Stratified by Age

With the model stratified by patient age, residents with the religious affiliation ‘other’ communicated better with 12- to 16-year-old patients than Catholic residents $\{Z = 2.23, (CI .03, .43), p < .03\}$. There were no significant results for patients aged seventeen and older.

Model Stratified by Gender

The model stratified by gender match of resident to patient exhibited multiple communication differences. Among male residents seeing male patients, communication improved with second-year residents $\{Z = -3.23, (CI -2.52, -.62), p < .001\}$, being Caucasian $\{Z = 2.76, (CI .24, 1.43), p < .006\}$, and ‘other’ affiliation v. Catholic $\{Z = -1.79, (CI -1.31, .06), p < .05\}$. Male residents treating female patients had decreased communication when they were Protestant $\{Z = -2.15, (CI -1.02, -.05), p < .03\}$ or ‘other’ $\{Z = -2.52, (CI -1.15, -.14), p < .01\}$ v. ‘Catholic’. Communication was improved with higher religiosity levels of residents $\{Z = 3.25, (CI .03, .11), p < .001\}$ and at Communication Time 2 $\{Z = 2.04, (CI .01, .55), p < .04\}$ and Time 3 $\{Z = 2.00, (CI .01, .56), p < .04\}$. Female residents with higher religiosity levels communicated more effectively with male patients $\{Z = 2.84, (CI .03, .19), p < .005\}$, as did residents with ‘other’ $\{Z = 2.57, (CI .2, 1.47), p < .01\}$ and ‘no affiliation’ $\{Z = 2.79, (CI .27, 1.53), p < .005\}$ compared to Catholic residents. Female residents who identified as Protestant paired with female patients displayed better communication than Catholic residents $\{Z = 2.42, (CI .05, .47), p < .015\}$.

Model Stratified by Clinic Visit Type

Improved communication was displayed for gynecology, STI, and contraception visits when higher resident religiosity was present $\{Z = 2.03, (CI .001, .07), p < .04\}$. Protestants communicated better than Catholics with ‘other’ visit types $\{Z = 2.29, (CI .05, .67), p < .02\}$. Residents at Communication Time 2 v. Time 1 had worse communication skills $\{Z = -2.73, (CI -1.01, -.17), p < .006\}$ when there were multiple complaints in a visit. There were no communication differences for physical (‘well visit’) visit types.

Discussion

Our data show that religious affiliation, religiosity, and spirituality appear to affect patient perception of communication during adolescent medicine clinic visits, but have limited effects on self-efficacy. As shown in the full model, it is interesting to note that female

residents had higher communication scores than male residents with male patients for all visits in the adolescent clinic. These findings are similar to previous work with adult patients which found that male patients with female providers had the highest satisfaction ratings (Schmittiel et al. 2000). Reasons for such satisfaction are likely multifactorial, but previous research focused on communication style and patient–provider agreement on level of patient involvement in care as contributing factors (Jahng et al. 2005). Despite satisfaction and communication levels, overall care has not been shown to be affected by medical provider gender (Flocke and Gilchrist 2005).

Looking further at female residents working with male patients in the stratified model, this study’s patient population also perceived better communication when female residents had higher religiosity levels and identified as ‘other’ or ‘no religious affiliation’ compared to female Catholic residents. In 2008, Street and colleagues found that the patient–provider relationship may be strengthened when patients perceive that providers share similar values and personal beliefs (Street et al. 2008), but studies have not specifically investigated provider religious affiliation and religiosity in the context of patient communication.

For male residents seeing male patients, communication levels improved when residents were Caucasian, in higher levels of training, and were ‘other’ religious affiliations compared Catholicism. In comparison, male residents working with female patients had improved communication scores when they were Protestant or ‘other’ v. being Catholic. Additionally, female residents providing care for female patients received better communication scores when they were Protestant v. Catholic.

Such findings echo previous studies that suggest that certain religious beliefs may affect provider ability to discuss all health options if they feel certain medical issues or treatments go against their established religious beliefs. A 2007 *New England Journal of Medicine* study showed that physicians with higher religiosity and/or religious affiliation were more likely to report that doctors can tell patients of their objections to certain medical procedures, may leave out all possible medical options for care, and may not refer patients to someone who does not object to such care (Curlin et al. 2007).

The stratification by clinic visit type displayed communication differences as well. Increased resident levels of religiosity, spirituality, and being Protestant led to increased communication for certain visit types including provision of contraception, STI, and ‘other’ visits. In contrast, being Catholic and providing care in the middle of the rotation led to decreased communication scores. Well visits displayed no communication score differences based upon religiosity, spirituality, or religious affiliation, suggesting that more ‘generalized’ visit types may allow for medical providers to feel less conflicted about their beliefs in respect of patient care. Younger patients perceived that residents with ‘other’ religious affiliations communicated better than Catholic residents, while older patients did not have any significant results based upon religiosity, spirituality, or religious affiliation. Based on such results, certain providers may perceive younger patients as having fewer medical issues, especially those which may conflict with personal religious or spiritual beliefs. Interestingly, this may also lead to subsequent patient perception of more superficial communication levels.

As Brown and Wissow found in their 2009 study with 11–16-year-old patients, adolescents felt providers understood their problems, allowed more decision making and control in visits, and eased concerns better when primary care visits included so-called sensitive health topics including mood, drugs and alcohol, sexual activity, and family issues (Brown and Wissow 2009). Given such outcomes, understanding differences in provider religious affiliation and religiosity in patient care will be vital for adolescents,

especially as certain groups in our study had differing (male v. female residents) or lower (Catholic residents v. other religious affiliations) communication scores.

Limitations

Limitations of our study should be considered as we had a relatively small study population which may have affected the overall analysis. The study was conducted at one urban institution with a largely African-American patient population within a singular adolescent medicine clinic potentially limiting generalizability to all populations. Additionally, residents from one pediatric residency program were queried about their religiosity, spirituality, and religious affiliation; provider levels at other institutions may similarly not be generalizable to other medical care areas.

Conclusions

Medical provider religious affiliation, religiosity, and spirituality appear to play a role in medical care with adolescent patients, especially regarding perceived communication levels. Further investigation is warranted in this area, particularly for resident and patient gender correlations which exhibited significant findings in our study. Assessing personal beliefs and the influence on subsequent patient care is important for the high-risk and high-need adolescent patient population. Further research would allow for the creation of educational tools to assist with adolescent health visits, especially centering on interviewing and communication skills. Additionally, such research would enable educators to teach residents an appropriate skill set for a more complete adolescent health visit including the role of personal views and beliefs and how they may affect patient care.

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Compliance with Ethical Standards

Conflict of interest Jennifer L. Woods and Devon J. Hensel have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all participants.

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