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Ministry in Medicine: Patient Perceptions of Healthcare Professionals Praying in the Workplace

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Ministry in Medicine:

Patient Perceptions of Healthcare Professionals Praying in the Workplace

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Ministry in Medicine: Patient Perceptions of Healthcare Professionals Praying in the Workplace

Abstract

In the United States healthcare system, many patients practice prayer which causes healthcare providers to navigate the boundaries of patient-practitioner relationship when considering offering to pray with their patients. Practitioners should have the freedom to offer prayer to their patients because of the healing and calming properties of prayer. This study examines how patients respond when practitioners offer to pray with them, whether patients consider religion when selecting a healthcare provider, and if prayer from a provider with a religious affiliation different from their own impacts the desire for patients to accept prayer.

Background

Personal Significance

After serving at Young Life Camp during the summer between my sophomore and junior year of college, I worked with many different physicians, physician assistants and nurses who identified as Christians. They all shared stories with me about praying with their patients and miraculous stories of healing. However, they all cautioned me about boundaries in the patient-practitioner relationship when spirituality and religion arise. As a follower of Jesus who practices prayer, and a future medical professional with a desire to incorporate prayer into practice while also respecting patients and their beliefs, I wanted to research patient perceptions of prayer in the healthcare setting. When I approached Dr. Brenda Quincy and other medical professionals about this possible research project, I was met with great interest. Many of these healthcare workers

were curious about the results of the survey and what they could mean for their future patient interactions. I am fascinated by the possible conclusions from this study as I enter into the medical field as a physician. I hope to incorporate spirituality into my patient care on some level, and I am hopeful to one day pray for my patients as I come alongside them in all areas of wellness.

Review of Literature/Background

View of Prayer in Different Religions

Prayer is an important spiritual discipline in many different religions. The top global religions by number of people practicing are Christianity (31.5%), Islam (23.2%), Unaffiliated (16.3%), Hinduism (15%), Buddhism (7.1%) and Judaism (0.2%), all religions but "Unaffiliated" religions practice prayer (The Pew Research Center, 2012). These religions all similarly view prayer as one of the primary methods to connect with the God they serve. However, practitioners of each faith may pray differently. Muslims are required to pray five times each day to Allah (the Arabic word for God) and most go to a noon service on Fridays for congregational prayer. They regard prayer from a more ritualistic lens for purification. Those who practice Judaism are advised to pray three times a day to express thankfulness, devotion, or to ask God for assistance. Islam and Judaism regard prayer more as an expression of worship than as a request to God (Hawary, 2013). Christianity references the Lord's prayer first spoken by Jesus in the gospels with reference to the structure of adoration, confession and petition. Within Christianity, a relationship with God is emphasized with prayer being a primary method to connect with God in Heaven (Sheldrake, 2013). Within the Hindu religion, prayer is called Prārthana which means "to communicate to God" (Cline, 2018). Additionally, there are broad

classifications of prayer that refer to the method of praying whether it be mental, verbal or physical. These categories are called Mānasika, Vācika and Kāyika, and they reference how prayer can be in any form for Hindu worship (Cline, 2018).

Recently, during the Sars-CoV-19 pandemic, these religions have navigated the difficult boundaries of practicing prayer and congregational worship when not able to gather in the same place due to the new social-distancing guidelines. Many religions have moved their services online to remain accessible and held interactive prayer rooms for participants (Baker, 2020). Many churches, temples and mosques have been mandated around the world to close their doors, which has resulted in resistance from those in positions of religious leadership. For example, Jews in Israel have challenged the government sanctions restricting public prayer gatherings and life cycle events in the city (The Economist Newspaper, 2020). However, religion has also been accredited to having positive effects on individual disposition, national health care (through faith-based hospital systems) and social support (Levin, 2020).

Prayer Research

The results of a 2014 General Social Survey from the Association of Religion Data Archives found 57% of Americans pray at least daily, with 24% of people praying several times a day (Smith, 2019). People pray to connect with God or a higher being, desiring to believe in something greater than themselves. Often though, prayer is used as a means of healing. Most scientific studies regard prayer with reference to the healing of injured or sick patients. One survey conducted in a 2011 study found that 49% of Americans specifically prayed for their health - and the rate of prayer increased as the direness of the disease state increased (Wachholtz, 2012). Among 78 hospitalized study subjects, 88% accepted the offer of prayer from a massage

therapist and 85% found it beneficial (McMillan, 2018). Additionally, prayer has been studied as a coping mechanism for mental illnesses. In 2013, a study following individuals with depression over five years found significant prevalence of prayer used as a coping mechanism among those suffering from the disorder (Wachholtz, 2012).

Other studies have investigated the healing power prayer provides through experimentation. There have been double-blinded and triple-blinded studies conducted where prayer has been found to benefit patient outcomes (Andrade, 2009). A masked and randomized study regarding the effect of intercessory prayer on the success of embryo transfer in the in-vitro fertilization process found there to be a higher implantation (16.3% vs 8%, $p = 0.0005$) and pregnancy rate (50% vs 26%, $p = 0.0013$) with the IP group compared to the no IP group. This trial was conducted with 219 subjects over a four month period (Cha, 2001). Another study evaluated the effect of intercessory prayer on spiritual distress, coping and anxiety during breast cancer treatment. After studying 31 participants randomly assigned to the prayer vs no prayer groups over the course of their radiotherapy treatment, with 15 not receiving prayer and 16 receiving the prayer, researchers found spiritual distress reduced among those in the intercessory prayer group (Miranda, 2019).

Other studies have found prayer to have no effect on patient outcomes. A study conducted by the Mayo Clinic with 800 coronary care unit patients, both receiving and not receiving intercessory prayer, found the end points (death, cardiac arrest, rehospitalization, or emergency department visit) occurred in 25.6% of the intercessory prayer group and 29.3% of the control group (odds ratio [OR], 0.83 [95% confidence interval (CI), 0.60–1.14]; $p = 0.25$) (Aviles, 2001). Benson et al. investigated the possibility of prayer having a negative effect on patient outcomes. They observed the effect of intercessory prayer on the complications of two

groups of cardiac bypass patients, one group of 604 received intercessory prayer and another group of 597 patients did not receive intercessory prayer. Both groups were informed they may or may not receive prayer; but after observation, complications were reported in 52% (315/604) of patients who received the intercessory prayer compared to 51% (304/597) of the group who did not receive intercessory prayer (relative risk 1.02, 95% CI 0.92-1.15) (Benson, 2006). Although some in the scientific community resist studies on prayer due to their spiritual nature, researchers are working to develop improved methods to continue studying prayer. One study published in 2012 examined how evidence-based medicine and empirical data can be applied to study the healing effects of Pentecostal Christian prayer. Researchers are continually working to produce methods to study the power of prayer to investigate healing claims occurring across the world (Brown, 2015).

Ethical Considerations

Historically in Western cultures, spirituality and religion were integrated into medicine. Society placed an emphasis on the more holistic approach to health care, connecting medicine to spiritual beliefs. However, as the medical field became more secularized due to urbanization and greater understanding of disease pathology, medicine diverged from religion and became rooted in scientific study (Poltzer, 2012). For this reason, medicine and religion seem to be in opposition. Additionally, there are new concerns of incorporation of prayer into the healthcare setting or workplace in general due to ethical implications. A study of the ethical aspects of spiritual practices in healthcare found patients wary of spiritual care. Prayer was considered a prescriptive approach to spiritual needs because it seeks to modify the patient's spirituality – potentially leading to unintended coercion (Poltzer, 2012). The place of religiosity and

spirituality in healthcare has been debated, but most published studies agree that healthcare providers may pray with their patients as long as the patient requests prayer and the healthcare provider is at ease with the situation (Pembroke, 2008). These ethical concerns regarding prayer may keep medical workers hyper-aware of overstepping the patient-practitioner relationship. Some may even fear losing their position or respect of the medical community by offering to pray with their patients. In March 2017, nurse Sarah Kuteh was released from her hospital position because she was praying with patients before their surgeries (Hackett, 2019). Although offerings of prayer may be stricter in the medical workplace, many patients desire for their physicians to know about their religiosity and/or spirituality. One study conducted with 450 patients found two thirds of the sample felt their physicians should generally be aware of their religious and spiritual beliefs (MacLean, 2003). This is consistent with Oyama and Koenig's findings that 73% of outpatient subjects indicated physicians should have knowledge of their patients' religious beliefs (Maclean, 2003). Patients who generally wish to receive spiritual care are most likely suffering from a life-threatening diagnosis, a serious medical condition, or have recently experienced great loss. Healthcare workers are most likely to offer prayer when they identify as religious and/or spiritual and have been in practice for longer than 15 years (Pembroke, 2008).

Current Applications

There is a growing scientific literature on the impact of prayer on patient outcomes (Benson, 2006; Brown, 2012; Cha, 2001; Duckro, 1994; Miranda, 2019; Wachholtz, 2012) and ethical considerations of incorporating spirituality into the healthcare environment (Liefbroer, 2019; Polzer, 2012; Luckhaupt, 2005). There also are studies of the barriers healthcare providers

face when addressing religion in the hospital setting (McMillan, 2018; MacLean, 2003), nurses praying with patients (Fitch, 2019), and religious characteristics of doctors and physician assistants in the United States (Levin, 2016; Curlin, 2005; Curlin, 2006). There have also been studies examining the correlation between specific disease-states and prayer (Astin, 2006; Aviles, 2001), but there is a paucity of research regarding generalized patient-provider prayer. The current study aimed to examine how patients respond when practitioners offer to pray with them, whether patients consider religion when selecting a healthcare provider and if prayer from a provider with a religious affiliation different than their own impacts the desire for patients to accept prayer.

Methods

Participants

The study population included Butler University students enrolled in fall semester 2020, whose email addresses were available in the campus residential software system (those who lived in campus housing), in addition to graduate pharmacy and physician assistant students. All students for whom email addresses were available were invited to participate. This project was deemed exempt by the Butler University Institutional Review Board.

Data Collection Instrument

A computer formatted Qualtrics survey was constructed for data collection through an embedded email link. The survey included 17 closed-ended questions to allow for numeric coding of responses and facilitate statistical analysis. There were an additional 4 questions asked of students who had prayed with a provider. The survey included eight demographic

characteristics of the respondents such as gender, race, ethnicity, year in school, college, major and religion. Then participants were asked to respond to a series of Likert statements, using a 5-point scale, 1 = “Strongly Agree”, 2 = “Agree”, 3 = “Neither Agree nor Disagree", 4 = “Disagree” and 5 = “Strongly Disagree.” The nine Likert statements assessed participants’ perspectives on the importance of religion when selecting a healthcare provider and their thoughts and experiences regarding a healthcare provider offering to pray with them. In addition, those who responded affirmatively that a provider has offered to pray with them were asked about their responses and their perceptions of the experience. See Appendix A for a complete list of survey items.

Data Collection Procedures

An invitation to participate in the survey was distributed via email on September 28th, 2020. The email included a link to the survey which was developed and housed on the Qualtrics platform. Email reminders were sent on October 5th and October 9th. The survey was open through October 12th, 2020. Following the closing of the survey, the response data were downloaded from the Qualtrics platform to a Microsoft Excel workbook and prepared for analysis.

Statistical Analysis

Baseline characteristics of the sample were summarized with number and percentage for categorical data, and mean and standard deviation for continuous data. They were compared to characteristics of the full student body published online by the university, in the Butler University Fact Book, to assess representativeness of the sample. Responses to Likert items were

summarized with mean and standard deviation, and then compared among subgroups defined by the respondent's religion, year in school, and college/school using analysis of variance. For categorical outcomes, chi square analysis was performed to determine if the differences between observed and expected outcomes among subgroups were greater than could be expected by chance alone. All statistical analyses were performed with IBM SPSS Statistics, version 26. Following a Levene's test for homogeneity of variances, post hoc testing was performed with Tukey's if homogeneity of variances could be assumed and with Tamhane's if variances could not be assumed equal.

Results

Of the 5,544 students enrolled in Butler University in fall semester 2020, 2953 (53.3%) were sent an email invitation to participate in the survey. Of the 2953 students invited, 1243 responded, for a response rate of 42.1%. Of the 1243 responses, 1168 were complete and included in the analysis. Respondents were 69.8% female, 29.0% male, 1.0% Gender variant/Non-conforming and 0.2% Transgender male. Almost half (45.5%) of the group was from Indiana, 90.6% were white, and 95.6% were Non-Hispanic. The distribution across years of education included 35.4% first-year students, 15.2% sophomore, 18.4% junior, 22.7% senior and 8.3% graduate students. Nearly a third (32.6%) were enrolled in the College of Liberal Arts and Sciences, 17.0% the Lacy School of Business, 11.2% the College of Communication, 6.2% the College of Education, 8.0% the Jordan College of the Arts and 25.0% from the College of Pharmacy and Health Sciences. The most common majors in the sample included professional phase pharmacy students (14.1%), Biology (BA, BS) (4.9%), Finance (BS) (4.5%), Marketing (BS) (4.5%) and Psychology (BA) (4.2%). The distribution of religions among respondents

included 68.7% Christian/Catholic, 27.3% unaffiliated (including agnostic), and 1.5% Jewish. Islam, Buddhism, Hinduism, and Atheism included less than 1% of respondents. See Table 1.

Table 1. *Baseline Characteristics*

Characteristic (N = 1168)	**n (%)**
Gender	
Male	357 (29.0)
Female	859 (69.8)
Gender Variant/Non-conforming	12 (1.0)
Transgender Male	3 (0.2)
Race	
White	1109 (90.6)
Black or African American	35 (2.9)
Asian	48 (3.9)
American Indian or Alaska Native	4 (0.3)
Biracial/Multiracial	14 (1.1)
Other	9 (0.7)
Asian-American	2 (0.2)
Native Hawaiian or Pacific Islander	2 (0.2)
Latino	1 (0.1)
Ethnicity	
Non-Hispanic	1165 (95.6)
Hispanic	54 (4.4)
State	
Indiana	559 (45.5)
Surrounding States of Indiana (Illinois, Michigan, Kentucky, Ohio)	432 (35.2)
Other States	236 (19.1)
International	2 (0.2)
Year in school	
First year	436 (35.4)
Sophomore	187 (15.2)
Junior	227 (18.4)
Senior	280 (22.7)
Graduate Student	102 (8.3)

Butler University College		
	College of Liberal Arts and Sciences	402 (32.6)
	Lacy School of Business	209 (17.0)
	College of Communication	138 (11.2)
	College of Education	76 (6.2)
	Jordan College of the Arts	99 (8.0)
	College of Pharmacy and Health Sciences	308 (25.0)
Religious affiliation		
	Christianity/Catholic	802 (68.7)
	Unaffiliated	319 (27.3)
	Judaism	17 (1.5)
	Islam	7 (0.6)
	Buddhism	6 (0.5)
	Hinduism	6 (0.5)
	Atheist	6 (0.5)
	Other	5 (0.5)

Likert responses

For evaluation of Likert responses, mean values from 1.00 - 1.49 were interpreted as "Strongly Agree," values from 1.5 – 2.49 were interpreted as "Agree," values 2.5 – 3.49 were interpreted as "Neither Agree nor Disagree," values 3.5 – 4.49 were interpreted as "Disagree," and values 4.5 – 5.0 were interpreted as "Strongly Disagree." Respondents (n = 1168) generally disagreed with the statement that they considered religion when seeking a healthcare provider for care ($M = 3.92$, $SD = 0.99$). They also leaned toward disagreement that they preferred a healthcare provider with the same religion as their own ($M = 3.44$, $SD = 1.02$). Respondents agreed they would be comfortable receiving medical care from a provider with a religion different from their own ($M = 1.70$, $SD = 0.785$) and disagreed that they would never accept prayer from a healthcare provider ($M = 3.79$, $SD = 1.18$). When considering whether the respondent would feel comfortable praying with a healthcare provider who practices a specific religion, respondents remained generally neutral. See Table 2.

Table 2. *Overall Likert Statement Responses, Mean (SD)*

	Mean (SD)
I consider religion when seeking a healthcare provider	3.92 (0.99)
I prefer a healthcare provider with the same religion as my own	3.44 (1.02)
I would be comfortable receiving medical care from a provider with a different religion than my own	1.70 (0.79)
I would never accept prayer from a healthcare provider	3.79 (1.19)
If my healthcare provider asked to pray with me and the religion they practiced was **Buddhism**, I would pray with them	2.92 (1.20)
If my healthcare provider asked to pray with me and the religion they practiced was **Christianity**, I would pray with them	2.27 (1.26)
If my healthcare provider asked to pray with me and the religion they practiced was **Hinduism**, I would pray with them	2.94 (1.21)
If my healthcare provider asked to pray with me and the religion they practiced was **Islam**, I would pray with them	2.93 (1.22)
If my healthcare provider asked to pray with me and the religion they practiced was **Judaism**, I would pray with them	2.84 (1.19)

Likert Scale: 1 - Strongly Agree, 2 - Agree, 3 - Neither agree nor disagree, 4 - Disagree, and 5 - Strongly disagree

Respondents were asked to select as many as applied from a list of adjectives (supportive, caring, helpful, rude, invasive, manipulative) to indicate their perceptions of healthcare providers who offer to pray with their patients. The most commonly selected (70.0%) term was caring. More than half (59.2%) of respondents selected supportive, 27.4% selected helpful, 23.7% selected invasive, and 3.5% selected manipulative. The term selected the least often (2.5%) was rude. Among the 63 respondents who reported being asked by a provider if they would receive prayer, 55 (87.3%) answered affirmatively. See Table 3.

Table 3. *Respondents' descriptions of healthcare providers who offer to pray*

	n (%)
A healthcare provider who offers to pray with their patients is…*	
Supportive	691 (59.2)
Caring	817 (70.0)
Helpful	320 (27.4)
Rude	29 (2.5)
Invasive	277 (23.7)
Manipulative	41 (3.5)
Has a healthcare provider ever asked if they could pray with you	63 (5.8)
I have accepted prayer from a healthcare provider (n=63)	55 (87.3)

*Respondents could select more than one descriptive term so the percentages total more than 100%

Of the 55 survey participants who accepted healthcare provider-initiated prayer, respondents agreed they felt comfortable praying with their healthcare provider (M = 1.87 SD = 0.91). Respondents disagreed that the boundaries of the patient-practitioner relationship were compromised when their healthcare provider asked if they could pray with them (M = 4.04 SD = 0.80). Overall, the respondents believed that they benefitted from praying with their healthcare provider (M = 2.11, SD = 0.84). See Table 4.

Table 4. *Likert Responses from Respondents (n = 55) who accepted prayer from a healthcare provider*

	M (SD)
I felt comfortable praying with my healthcare provider	1.87 (0.91)
I felt the boundaries of the patient-practitioner relationship were compromised when my healthcare provider asked if they could pray with me	4.04 (0.80)
I benefited from praying with my healthcare provider	2.11 (0.84)

Likert Scale: 1 - Strongly Agree, 2 – Agree, 3 - Neither agree nor disagree, 4 – Disagree, 5 - Strongly

The perceived impact of prayer on the patient-provider relationship included increased trust (60%), strengthened relationship (61.8%), and built rapport (32.7%). None of the respondents thought that prayer hurt the relationship with the healthcare provider or decreased trust. Prayer resulted in healing for 21.8% and improved overall well-being for 40%. The greatest response came from 74.5% of this subset of respondents who indicated that healthcare provider-initiated prayer brought peace, whereas only 3.6% of participants answered the prayer brought anxiety. See Table 5.

Table 5**.** *Impact of prayer from a healthcare provider on patients who accepted it (n = 55)*

	n (%)
How did having a healthcare provider pray with you affect your relationship with him/her?	
Increased Trust	33 (60.0)
Strengthened relationship	34 (61.8)
Built rapport	18 (32.7)
Hurt the relationship	0 (0.0)
Decreased Trust	0 (0.0)
How did receiving prayer from a healthcare provider affect your life?	
Resulted in Healing	12 (21.8)
Brought Peace	41 (74.5)
Improved Overall Well-being	22 (40.0)
Brought Anxiety	2 (3.6)

Perceptions of Healthcare Provider Initiated Prayer

Participants' perceptions of a healthcare provider offering prayer were stratified by participant religion. Among those who practice Christianity, Islam, or Hinduism, more than half the sample selected "supportive" or "caring" to describe a healthcare provider who offers to pray. Those who identified as Jewish selected "invasive" most frequently, whereas the

religiously unaffiliated selected "supportive" (40.0%), "caring" (50.5%) or "invasive" (40.8%) most often. Among atheists, the most frequently selected term was "invasive" (66.7%). For all of the terms (supportive, caring, helpful, rude, invasive and manipulative), there was a statistically significant difference between observed and expected outcomes across religion groups. See Table 6.

Table 6. *Patient perceptions of healthcare providers who offer prayer, by patient religion*

	A healthcare provider who offers to pray with their patients is…					
Patient religion	**Supportive* n (%)**	**Caring* n (%)**	**Helpful* n (%)**	**Rude* n (%)**	**Invasive* n (%)**	**Manipulative* n (%)**
Christian/ Catholic (n=802)	557 (69.5)	628 (78.3)	281 (35.0)	7 (0.8)	128 (16.0)	12 (1.5)
Judaism (n=17)	3 (17.6)	5 (29.4)	0 (0.0)	2 (11.8)	10 (58.8)	2 (11.8)
Buddhism (n=6)	3 (50.0)	3 (50.0)	2 (33.3)	0 (0.0)	2 (33.3)	1 (16.7)
Islam (n=7)	7 (100.0)	5 (71.4)	3 (42.9)	0 (0.0)	0 (0.0)	0 (0.0)
Hinduism (n=6)	6 (100.0)	6 (100.0)	1 (16.7)	1 (16.7)	1 (16.7)	1 (16.7)
Unaffiliated (n=319)	118 (40.0)	161(50.5)	33 (10.3)	18 (5.6)	130 (40.8)	23 (7.2)
Atheist (n=6)	2 (33.3)	3 (50.0)	0 (0.0)	1 (16.7)	4 (66.7)	2 (33.3)
χ^2	129.9	106.0	82.0	38.2	105.6	48.2
p	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$

* Pearson's Chi Square analysis revealed a significant difference between observed and expected across religion categories, $p < 0.05$

Note: WICCA, Quaker, Episcopalian, Neopagan and Sikhism were excluded from the analysis due to limited sample population

The participants' perceptions of a provider who offers to pray were further examined by year in school. Five of the six descriptors were found to be statistically significant differently distributed across years in school, but "caring" was not. All student grade levels generally viewed a healthcare provider offering to pray more positively than negatively. First-year students surveyed generally viewed a healthcare provider who offers to pray with more positive words than negative. Over 60% of first-year students viewed a praying healthcare provider as supportive. Few first-year respondents described a praying healthcare provider as rude, invasive and manipulative. The term "invasive" was used most often (18.3%), though still less often than expected statistically, by first-year respondents. About 57% of sophomore students found a praying healthcare provider to be supportive, and 66.3% to be caring. See Table 7.

Table 7. *Patient perceptions of healthcare providers who offer prayer, by patient year in school*

	A healthcare provider who offers to pray with their patients is…					
Year in School	**Supportive* n (%)**	**Caring n (%)**	**Helpful* n (%)**	**Rude* n (%)**	**Invasive* n (%)**	**Manipulative* n (%)**
First-Year (n=436)	263 (60.3)	307 (70.4)	129 (29.6)	7 (1.6)	80 (18.3)	6 (1.4)
Sophomore (n=187)	108 (57.8)	124 (66.3)	38 (20.3)	1 (0.5)	48 (25.7)	8 (4.3)
Junior (n=227)	116 (51.1)	142 (62.6)	48 (21.1)	8 (3.5)	57 (25.1)	11 (4.8)
Senior (n=280)	142 (50.7)	173 (61.8)	65 (23.2)	12 (4.3)	79 (28.2)	14 (5.0)
Graduate Student (n=102)	68 (66.7)	69 (67.6)	40 (39.2)	1 (39.2)	13 (12.7)	2 (2.0)
χ^2 p	13.5 $p = 0.009$	7.3 $p = 0.119$	19.2 $p = 0.001$	10.5 $p = 0.033$	14.0 $p = 0.007$	10.3 $p = 0.035$

* Pearson's Chi Square analysis revealed a significant difference between observed and expected across year in school categories, $p < 0.05$

Mean responses to Likert statements across subgroups

For the statement "I consider religion when seeking a healthcare provider", respondents from the College of Liberal Arts and Sciences disagreed ($M = 4.02$, $SD = 0.96$) significantly more strongly than those from the College of Pharmacy and Health Sciences ($M = 3.74$, $SD = 0.99$), $p = 0.005$. Regarding whether the participant prefers a healthcare provider with the same religion, the College of Liberal Arts and Sciences ($M = 3.52$, $SD = 1.00$) and the Jordan College of the Arts ($M = 3.67$, $SD = 1.09$) leaned further toward disagreement than the College of Pharmacy and Health Sciences ($M = 3.26$, $SD = 0.98$). Regarding the statement "I would pray with a provider who practiced Christianity" respondents from the Lacy School of Business ($M = 2.07$, $SD = 1.09$) reported statistically significantly greater levels of agreement compared with those from the College of Liberal Arts and Sciences was ($M = 2.37$, $SD = 1.27$), $p = 0.045$, and those from the Jordan College of the Arts ($M = 2.63$, $SD = 1.32$), $p = 0.008$. Those from the College of Pharmacy and Health Sciences ($M = 2.06$, $SD = 1.21$) also agreed statistically significantly more than those from the Jordan College of the Arts ($M = 2.63$, $SD = 1.32$), $p = 0.005$, those from the College of Communication ($M = 2.47$, $SD = 1.33$), $p = 0.046$, and those from the College of Liberal Arts and Sciences ($M = 2.37$, $SD = 1.27$), $p = 0.019$. There were no other significant differences across colleges. See Table 8.

Table 8. *Mean (SD) for Responses to Likert Statement by College*

	LAS	JCA	LSB	CComm	COPHS	COE
I consider religion when seeking provider	4.02* (0.96)	3.97 (1.15)	3.88 (0.97)	4.03 (0.92)	3.74* (0.99)	3.96 (0.97)
I prefer a healthcare provider with same religion as myself	3.52* (1.00)	3.67^ (1.09)	3.48 (1.05)	3.45 (1.01)	3.26*^ (0.98)	3.33 (1.11)
I feel comfortable receiving care from provider with different religion than my own	1.62 (0.74)	1.75 (0.97)	1.79 (0.80)	1.62 (0.73)	1.77 (0.79)	1.70 (0.77)
I would pray with a provider who practices **Buddhism**	2.85 (1.20)	3.01 (1.24)	2.92 (1.23)	2.93 (1.17)	2.95 (1.18)	3.10 (1.29)
I would pray with a provider who practices **Christianity**	2.37*"[1] (1.28)	2.63^ (1.32)	2.07*^ (1.09)	2.47' (1.33)	2.06'[1]" (1.21)	2.24 (1.41)
I would pray with a provider who practices **Hinduism**	2.86 (1.19)	3.02 (1.25)	2.94 (1.25)	2.98 (1.17)	2.96 (1.20)	3.11 (1.28)
I would pray with a provider who practices **Islam**	2.86 (1.21)	3.03 (1.26)	2.93 (1.25)	2.97 (1.19)	2.95 (1.20)	3.13 (1.27)
I would pray with a provider who practices **Judaism**	2.80 (1.16)	2.97 (1.24)	2.80 (1.22)	2.82 (1.17)	2.86 (1.20)	2.94 (1.26)
I would never accept prayer from healthcare provider	3.80 (1.18)	3.49 (1.36)	3.89 (1.12)	3.58 (1.20)	3.88 (1.14)	3.73 (1.31)

*"[1]^ ANOVA post hoc analysis (Tukey's or Tamhane's), $p < .05$

1 - Strongly Agree, 2 – Agree, 3 - Neither agree nor disagree, 4 – Disagree, 5 - Strongly disagree

LAS = College of Liberal Arts and Sciences, JCA = Jordan College of the Arts, LSB = Lacy School of Business, CCom = College of Communication, COPHS = College of Pharmacy and Health Sciences, COE = College of Education

Mean responses to Likert statements were compared across religions and there were several statistically significant differences between subgroups. The Likert scale applied was 1 = Strongly Agree, 2 = Agree, 3 = Neither Agree nor Disagree, 4 = Disagree, 5 = Strongly Disagree. For the statement "I consider religion when seeking a healthcare provider", Christians leaned towards agreement ($M = 3.68$, $SD = 0.93$) significantly more than those self-identified as Unaffiliated ($M = 4.49$, $SD = 0.87$), $p < 0.001$ who disagreed. Regarding whether the participant prefers a healthcare provider with the same religion, the mean score for Christians was ($M = 3.27$, $SD = 0.98$) which was significantly different from that of the followers of Buddhism ($M = 4.67$, $SD = 0.52$), $p = 0.028$ and those who reported being Unaffiliated ($M = 3.83$, $SD = 1.02$), $p < 0.001$, with Christians more likely to prefer praying with a healthcare provider with the same

religion. Buddhists ($M = 4.67$, $SD = 0.52$) disagreed with the statement more strongly than members of both Islam ($M = 2.86$, $SD = 0.99$), $p = 0.032$ and Judaism ($M = 3.29$, $SD = 0.85$), $p = 0.009$. For the statement "I feel comfortable receiving care from a healthcare provider with a different religion than my own, Christians agreed ($M = 1.74$, $SD = 0.75$) significantly more strongly than those self-identified as Unaffiliated ($M = 1.57$, $SD = 0.81$), $p = 0.028$. Regarding whether participants would pray with a healthcare provider who practices Buddhism, Jewish participants ($M = 3.94$, $SD = 0.90$) and the Unaffiliated ($M = 3.12$, $SD = 1.30$), $p = 0.012$ disagreed significantly more compared with Christians ($M = 2.82$, $SD = 1.14$), $p = 0.003$. For the statement "I would pray with a provider who practices Christianity", Christians ($M = 1.80$, $SD = 0.91$) agreed significantly more when compared to both Judaism ($M = 3.88$, $SD = 1.11$), $p < 0.001$ and Unaffiliated ($M = 3.27$, $SD = 1.318$), $p = 0.000$. Regarding whether the participant would pray with a provider who practices Hinduism, Christians ($M = 2.83$, $SD = 0.1.15$) agreed significantly more compared to both Jews ($M = 3.94$, $SD = 0.90$), $p = 0.003$ and the Unaffiliated ($M = 3.16$, $SD = 1.30$), $p = 0.002$. Jewish respondents also disagreed significantly more than those who practice Hinduism ($M = 1.67$, $SD = 0.82$), $p = 0.006$ when considering praying with a Hindu healthcare provider. For the statement "I would pray with a provider who practices Islam", Christians ($M = 2.81$, $SD = 0.1.15$) agreed significantly more when compared to both Jews ($M = 4.06$, $SD = 0.90$), $p = 0.001$ and the Unaffiliated ($M = 3.19$, $SD = 1.31$), $p < 0.001$. Those who practice Judaism disagreed significantly more when compared to both the Unaffiliated, $p = 0.035$ and followers of Islam ($M = 1.71$, $SD = 0.951$), $p = 0.005$. Regarding the statement "I would pray with a provider who practices Judaism", Christians ($M = 2.69$, $SD = 1.11$) agreed significantly more than the Unaffiliated ($M = 3.17$, $SD = 1.30$), $p < 0.001$. For the statement "I would never accept prayer from a healthcare provider", Hindus ($M = 4.17$, $SD =$

0.41) disagreed statistically significantly more compared with Jews ($M = 2.82$, $SD = 1.19$), $p = 0.016$ and the Unaffiliated ($M = 3.03$, $SD = 1.304$), $p = 0.011$. Christians ($M = 4.12$, $SD = 0.962$) disagreed significantly more than those who practice Judaism, $p = 0.010$ and those who are Unaffiliated, $p < 0.001$ when asked whether they would never accept prayer from a healthcare provider. See results in Table 9.

Table 9. *Mean (SD) for Responses to Likert Statement by Religion*

Statement	Christianity	Judaism	Buddhism	Islam	Hinduism	Unaffiliated	Atheist	Other
I consider religion when seeking provider	3.68* (0.93)	4.06 (0.83)	4.67 (0.82)	3.43 (0.79)	3.83 (1.47)	4.49* (0.87)	4.33 (1.21)	4.60 (0.55)
I prefer a healthcare provider with same religion as myself	3.27*^ (0.98)	3.29` (0.85)	4.67*`" (0.51)	2.86" (0.90)	3.67 (0.52)	3.83^ (1.02)	3.67 (0.82)	4.60 (0.55)
I feel comfortable receiving care from provider with different religion than my own	1.74* (0.75)	1.71 (0.85)	2.67 (1.86)	2.14 (0.38)	1.50 (0.84)	1.57* (0.81)	1.33 (0.82)	2.00 (1.73)
I would pray with a provider who practices **Buddhism**	2.82*^ (1.14)	3.94* (0.90)	3.17 (1.60)	3.00 (1.16)	2.33 (1.21)	3.12^ (1.30)	3.17 (1.47)	3.60 (1.34)
I would pray with a provider who practices **Christianity**	1.80*^ (0.91)	3.88* (1.11)	3.33 (1.63)	2.71 (1.11)	3.17 (1.17)	3.27^ (1.32)	3.33 (1.51)	3.60 (1.34)
I would pray with a provider who practices **Hinduism**	2.83*^ (1.15)	3.94*" (0.90)	3.33 (1.63)	3.14 (1.35)	1.67" (0.82)	3.16^ (1.30)	3.17 (1.47)	3.60 (1.34)
I would pray with a provider who practices **Islam**	2.81*^ (1.15)	4.06*"` (0.90)	3.33 (1.97)	1.71" (0.95)	2.67 (1.03)	3.19^` (1.31)	3.17 (1.47)	3.60 (1.34)
I would pray with a provider who practices **Judaism**	2.69* (1.11)	3.06 (1.35)	3.17 (1.84)	2.86 (1.07)	2.83 (0.75)	3.17* (1.30)	3.33 (1.51)	3.60 (1.34)
I would never accept prayer from healthcare provider	4.12*^ (0.96)	2.82*" (1.18)	3.00 (1.55)	4.00 (0.82)	4.17"` (0.41)	3.03^` (1.30)	3.00 (1.41)	2.60 (1.52)

*"[1]^` ANOVA post hoc analysis (Tukey's or Tamhane's), $p < .05$
1 - Strongly Agree, 2 – Agree, 3 - Neither agree nor disagree, 4 – Disagree, 5 - Strongly disagree
Note: the "Other" category was created from combining WICCA, Quaker, Episcopalian, Neopagan, and Sikhism

The findings for responses to Likert statements stratified by the participants' year in school and there were no statistically significant differences in responses to the Likert statements by the subject's year in school. See results in Table 10.

Table 10. *Mean (SD) for Responses to Likert Statement by Year in School*

	First Year	Sophomore	Junior	Senior	Graduate
I consider religion when seeking provider	3.86 (0.98)	3.88 (0.97)	3.99 (0.95)	4.03 (0.99)	3.77 (1.12)
I prefer a healthcare provider with same religion as myself	3.45 (0.96)	3.42 (1.04)	3.40 (0.99)	3.55 (1.09)	3.20 (1.07)
I feel comfortable receiving care from provider with different religion than my own	1.77 (0.83)	1.72 (0.76)	1.64 (0.76)	1.64 (0.77)	1.66 (0.72)
I would pray with a provider who practices **Buddhism**	2.93 (1.21)	3.06 (1.18)	2.90 (1.14)	2.93 (1.26)	2.70 (1.17)
I would pray with a provider who practices **Christianity**	2.19 (1.18)	2.28 (1.26)	2.24 (1.23)	2.43 (1.38)	2.16 (1.25)
I would pray with a provider who practices **Hinduism**	2.94 (1.22)	3.06 (1.21)	2.93 (1.15)	2.95 (1.25)	2.72 (1.18)
I would pray with a provider who practices **Islam**	2.93 (1.23)	3.05 (1.20)	2.90 (1.15)	2.98 (1.28)	2.71 (1.18)
I would pray with a provider who practices **Judaism**	2.84 (1.22)	2.93 (1.17)	2.84 (1.12)	2.87 (1.25)	2.59 (1.11)
I would never accept prayer from healthcare provider	3.85 (1.14)	3.71 (1.15)	3.79 (1.22)	3.70 (1.28)	3.88 (1.19)

1 - Strongly Agree, 2 – Agree, 3 - Neither agree nor disagree, 4 – Disagree, 5 - Strongly disagree

Discussion

The impact of prayer for healing has been evaluated and reported in the published literature, including double-blinded and triple blinded studies. Members of the general population have been queried regarding how much they pray and the nature of their prayers – whether they pray out of a sense of religious duty, or for divine intervention in their health, or for other reasons. However, there are few published studies examining patient perceptions of prayer from a healthcare provider. For example, McMillan found that clients who accepted prayer from

their massage therapist reported benefits (McMillan, 2018). In the present study, college students were surveyed regarding their perceptions of healthcare providers praying with their patients. Those who reported having prayed with a provider were further queried about their thoughts about that experience.

In the current study, most of the sample did not consider religion to be important when selecting a healthcare provider, nor was it important that their healthcare provider practice the same religion as the participant. On average, most participants disagreed that they consider religion when choosing a healthcare provider and agreed that they would be comfortable receiving medical care from a healthcare provider with a religion different from their own. Although many participants in this study identified with a major world religion (Christianity, Judaism, Buddhism, etc.), the lack of consideration of religion when choosing a healthcare provider may be due to the lack of importance of religion in the individual person's life or from the belief religion does not belong in healthcare. Although religion was not important to the participants when selecting a healthcare provider, on the average they did agree that they would be open to accepting prayer from a healthcare provider. Words such as "supportive", "caring" and "helpful" were used more frequently than "rude", "invasive" or "manipulative" when patients described their impression of healthcare providers who offer to pray with patients. Additionally, participants indicated they would pray with a healthcare provider rather than rejecting prayer outright. Among the negative descriptors, "invasive" was selected more often than "rude" or "manipulative." The word "invasive" connotates an intrusion into a person's thoughts or privacy, and with more than one quarter of the sample describing a praying healthcare provider as invasive, this suggests a desire among some of the sample to separate prayer and medicine.

A sound therapeutic relationship between patients and healthcare providers is a vital element of excellent healthcare. When deciding whether to offer prayer, healthcare providers must consider how prayer might affect their relationship with their patients. Of the participants who had been offered, and accepted, prayer from their healthcare provider, most agreed that the prayer had a beneficial effect. Increasing trust, strengthening the relationship and building rapport were the only phrases used to describe the interaction - not one respondent described the interaction negatively. The positive appraisal of their experience praying with a provider may be explained by the healthcare providers' inclination to only offer to pray with patients whom they expected to be receptive. It would be concerning if patients who were offered prayer reported a negative view of their relationship with their practitioner after prayer. It appears prayer may be a meaningful way to connect and empathize with some patients. As the length of the patient-provider interaction becomes increasingly shorter with advancing technology, it is important to remember human connection is at the core of medical practice (Haverfield, 2020). Prayer could offer a pathway to express compassion in medicine and improve the patient's experience receiving care.

Comparing the perceptions of prayer across different subgroups led to several meaningful discoveries. The sample comprised predominantly Christians (68.7%), which may explain some of the findings. For example, respondents were slightly more likely to accept prayer from a Christian provider than from those practicing other religions. Although participants generally disagreed that they would prefer a healthcare provider who practiced the same religion, the greater propensity to accept prayer from a Christian provider was likely due to the greater number of Christians in the sample. Students identifying as Christian generally viewed an offer of prayer from a healthcare provider in a positive light, whereas those who practice Judaism or

Buddhism viewed it more negatively. It is possible that the discrepancy can be explained by how members of each of the religious subgroups view or value prayer. Christian students may view the integration of faith and prayer with other aspects of their lives as more appropriate than their Buddhist or Jewish counterparts.

Only a small percentage (5.8%) of participants in the sample had been offered prayer by a healthcare provider. Of these 63 participants, more than 85% accepted prayer. The high level of acceptance may have occurred because healthcare providers only offer prayer when they suspect a particular patient will be open to the offer. Healthcare providers may be selective about whom they offer prayer because of concern about the boundaries and ethics of prayer in a medical setting. The high rate of acceptance of prayer may result from the strength of the patient-provider relationship. Perhaps when healthcare providers who have established strong bonds and rapport with their patients offer prayer, it is more likely to be accepted. Those who accepted prayer generally agreed that they felt comfortable praying with the provider and the prayer benefitted them. Many noted that the interaction brought them peace and improved their overall well-being, and just over 20% reported healing following the prayer, consistent with previously published studies (Duckro, 1994; Cha, 2001; Astin, 2006; Boelens, 2009).

Limitations

The priority of the study was to determine how patients perceive an offer from health care providers to pray with them. The sample was recruited from the student body at Butler University. Most of the participants were 18 - 22 years old. Although the sample was representative of the university population, generalizability of the findings to students enrolled in other institutions or to older or younger patients may be limited. Secondly, the majority of

respondents identified as Christian/Catholic or unaffiliated religions, with small numbers of subjects from other religions, which may have adversely affected the validity of subgroup analyses. The large proportion of Christian/Catholic respondents may have resulted from the connection of the principal investigator with larger Christian organizations on campus. These relationships may have resulted in a volunteer bias that had a difficult to quantify impact on validity. Thirdly, as with all survey research, it is possible that survey language was interpreted differently by the participants. Participants were given undefined particular words such "supportive", "caring", and "helpful", "rude", "invasive" and "manipulative" to describe a praying healthcare provider. Their individual understanding of the meaning of these terms may have impacted how participants responded to the questions.

Conclusion

Increasingly, healthcare providers aim to view the patient as a whole person rather than a collection of diseases, which leads to the emotional, mental and spiritual health becoming as important as the physical health of a patient. Spirituality, including prayer, cannot be overlooked as an avenue of treatment by a healthcare provider. The present findings suggest that patients are receptive to and benefit from prayer with a healthcare provider. Overall, participants generally reported healthcare providers offering to pray as supportive and caring rather than invasive or manipulative. This study contributes to the published literature on prayer in a healthcare setting. A larger study, with more diverse sample, would provide more conclusive findings to guide providers interested in a holistic approach to the practice of medicine.

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Compliance with Ethical Standards

Conflict of Interests: None to report

Appendix A

Ministry in Medicine Survey sent to Butler University Student Population

Initial Paragraph: "This survey includes general attitude questions as well as some demographic questions. Completing the survey should take about five minutes. Your participation in the research is completely voluntary and you are free to withdraw your consent to participate at any time without penalty. Your responses will be kept completely confidential and there are no foreseeable risks or benefits for you resulting from your participation. For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the Butler Office of Sponsored Programs (OSP) at (317) 940-9766 or by emailing IRB@butler.edu"

Q1 With which gender identity do you identify?

- o Female
- o Male
- o Transgender Female
- o Transgender Male
- o Gender-Variant/Non-conforming
- o Not listed
- o Other

Q2 Please specify your race

- o White
- o Black or African American
- o American Indian or Alaska Native
- o Asian
- o Native Hawaiian or Pacific Islander
- o Other

Q3 What is your ethnicity?

- o Hispanic
- o Non-Hispanic

Q4 What is your home state?

- o Alabama

- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota

- o Ohio
- o Oklahoma
- o Oregon
- o Pennsylvania
- o Rhode Island
- o South Carolina
- o South Dakota
- o Tennessee
- o Texas
- o Utah
- o Vermont
- o Virginia
- o Washington
- o West Virginia
- o Wisconsin
- o Wyoming
- o Other

Q5 What is your current year in school?

- o First Year
- o Sophomore
- o Junior
- o Senior
- o Graduate Student

Q6 In what Butler University college is your major?

- o College of Liberal Arts and Sciences
- o Lacy School of Business
- o College of Communication
- o College of Education
- o Jordan College of the Arts
- o College of Pharmacy and Health Sciences

Skip To: Q7 If In what Butler University college is your major? = College of Liberal Arts and Sciences
Skip To: Q8 If In what Butler University college is your major? = Lacy School of Business
Skip To: Q9 If In what Butler University college is your major? = College of Communication
Skip To: Q10 If In what Butler University college is your major? = College of Education
Skip To: Q11 If In what Butler University college is your major? = Jordan College of the Arts
Skip To: Q12 If In what Butler University college is your major? = College of Pharmacy and Health Sciences

Display This Question: If In what Butler University college is your major? = College of Liberal Arts and Sciences
Q7 What is your major in the College of Liberal Arts and Sciences?

- o Actuarial Science, BA, BS
- o Anthropology, BA
- o Anthropology and Religion, BA
- o Astronomy and Astrophysics, BA, BS
- o Biochemistry, BA, BS
- o Biology, BA, BS
- o Chemistry, BA, BS
- o Chinese, BA
- o Classics (Ancient Languages Track), BA
- o Classics (Greek and Roman Culture Track), BA
- o Computer Science, BA, BS
- o Creative Writing, MFA
- o Criminology, BA
- o Criminology and Psychology, BA
- o Economics, BA, BSE
- o English Literature (Concentration in Literature), BA
- o English Literature (Concentration in Creative Writing), BA
- o English Literature (Concentration in Literary Theory, Culture and Criticism), BA
- o English Literature (Concentration in Public and Professional Writing), BA
- o English, MA
- o English, MFA
- o Environmental Studies, BA, BS
- o Exploratory Studies
- o French, BA

- Gender, Women, and Sexuality Studies, BA
- General Program, AA, AS
- German, BA
- History, BA, MA
- History and Anthropology, BA
- History and Political Science, BA
- Individualized Major, BA, BS
- International Studies (Africa and the Middle East, Asia, Europe, or Latin America), BA
- Mathematics, BA, BS
- Multilingual, BA
- Peace and Conflict Studies, BA
- Philosophy, BA
- Philosophy and Psychology, BA
- Philosophy and Religion, BA
- Physics, BA, BS
- Political Science, BA
- Political Science and Psychology, BA
- Psychology, BA
- Psychology and Anthropology, BA
- Religion, BA
- Science, Technology, and Society, BA, BS
- Sociology, BA
- Sociology (Specialization in Social Work and Social Policy), BA
- Sociology and Criminology, BA
- Sociology and Criminology (Specialization in Social Work and Social Policy), BA
- Sociology and Psychology (Specialization in Social Work and Social Policy), BA
- Software Engineering, BA, BS
- Spanish, BA
- Statistics, BA, BS

Display This Question: If In what Butler University college is your major? = Lacy School of Business

Q8 What is your major in the Lacy School of Business?

- Accounting, BS, MPAcc

- o Business Administration, MBA
- o Economics, BA, BSE
- o Entrepreneurship and Innovation, BS
- o Finance, BS
- o International Business, BS
- o Management Information Systems, BS
- o Marketing, BS
- o Pharmacy, PharmD/MBA
- o Public Accounting, BS, MPAcc
- o Risk and Insurance, MS
- o Risk Management and Insurance, BS

Display This Question: If In what Butler University college is your major? = College of Communication

Q9 What is your major in the College of Communication?

- o Communication Sciences and Disorders, BA
- o Creative Media and Entertainment, BA
- o Critical Communication and Media Studies, BA
- o Human Communication and Organizational Leadership, BA
- o Journalism, BA
- o Music Industry Studies, BA
- o Sports Media, BA
- o Strategic Communication: Public Relations and Advertising, BA
- o Web Design and Development, BA

Display This Question: If In what Butler University college is your major? = College of Education

Q10 What is your major in the College of Education?

- o Educational Administration, MS (EPPSP)
- o Effective Teaching and Leadership, MS (METL)
- o Elementary Education (K-6 Elementary Education), BS
- o Elementary Education (Pre-K Early Childhood), BS
- o Middle/Secondary Education (Biology Education), BS

- o Middle/Secondary Education (Chemistry Education), BS
- o Middle/Secondary Education (English Education), BS
- o Middle/Secondary Education (Human Movement and Health Science Education), BS
- o Middle/Secondary Education (Physical Education), BS
- o Middle/Secondary Education (Health Education), BS
- o Middle/Secondary Education (Mathematics Education), BS
- o Middle/Secondary Education (Modern Foreign Languages Education - French, German, Spanish), BS
- o Middle/Secondary Education (Physics Education), BS
- o Middle/Secondary Education (Social Studies Education), BS
- o Middle/Secondary Education (Special Education), BS
- o School Counseling, MS
- o Youth and Community Development, BS

Display This Question: If In what Butler University college is your major? = Jordan College of the Arts

Q11 What is your major in the Jordan College of the Arts?

- o Art (Art + Design), BA
- o Art (Arts Administration - Art), BS
- o Arts Administration (Arts Administration), BS
- o Arts Administration (Art), BS
- o Arts Administration (Music), BS
- o Arts Administration (Theatre), BS
- o Dance (Pedagogy), BA
- o Dance (Performance), BFA
- o Dance (Arts Administration), BS
- o Music, BA
- o Music (Composition), BM
- o Music (Jazz Studies), BM
- o Music (Music Education - Choral/General, Instrumental/General, or Area - 5 year program), BM
- o Music (Performance - Instrumental, Piano, or Voice), BM
- o Music (Performance and Music Education - 5-year program), BM

- o Music, BMA
- o Music (Musicology), MA
- o Music (Composition), MM
- o Music (Conducting - Choral or Instrumental), MM
- o Music (Music Education), MM
- o Music (Performance - Instrumental, Piano, or Voice), MM
- o Music (Piano Pedagogy), MM
- o Music (with double major), MM
- o Theatre, BA

Display This Question: If In what Butler University college is your major? = College of Pharmacy and Health Sciences

Q12 What is your major in the College of Pharmacy and Health Sciences?

- o Doctor of Medical Science, DMS
- o Healthcare Business, BSHS
- o Health Sciences, BSHS
- o Pharmaceutical Sciences (Medicinal Chemistry, Pharmacy Administration, Pharmacology, Pharmaceutics, Clinical Sciences), MS
- o Pharmacy, PharmD
- o Pharmacy (Pharmaceutical Sciences), PharmD/MS
- o Physician Assistant, MPAS

Q13 With which religion are you affiliated?

- o Buddhism
- o Christianity
- o Hinduism
- o Islam
- o Judaism
- o Unaffiliated
- o Other

Q14 Survey Questions - Please respond to the following statements honestly (1 = Strongly Agree, 2 = Agree, 3 = Neither Agree nor Disagree, 4 = Disagree, 5 = Strongly Disagree)

1. I consider religion when seeking a healthcare provider
2. I prefer a healthcare provider with the same religion as my own

3. I would be comfortable receiving medical care with a provider with a different religion than my own
4. If my healthcare provider asked to pray with me and the religion they practiced was Buddhism, I would pray with them
5. If my healthcare provider asked to pray with me and the religion they practiced was Christianity, I would pray with them
6. If my healthcare provider asked to pray with me and the religion they practiced was Hinduism, I would pray with them
7. If my healthcare provider asked to pray with me and the religion they practiced was Islam, I would pray with them
8. If my healthcare provider asked to pray with me and the religion they practiced was Judaism, I would pray with them
9. I would never accept prayer from a healthcare provider

Q15 A healthcare provider who offers to pray with their patients is (please select all that apply)

- ☐ Supportive
- ☐ Caring
- ☐ Helpful
- ☐ Rude
- ☐ Invasive
- ☐ Manipulative
- ☐ Other

Q16 Has a healthcare provider ever asked if they could pray with you?

- o Yes
- o No

Skip To: Q17 If Has a healthcare provider ever asked if they could pray with you? = Yes

Skip To: End of Survey If Has a healthcare provider ever asked if they could pray with you? = No

Q17 I have accepted prayer from a healthcare provider

- o Yes
- o No

Skip to: Q18 - Q21 If I have accepted prayer from a healthcare provider = Yes
Skip to: End of Survey If I have accepted prayer from a healthcare provider = No

Q18 Please respond to the following statements honestly about your experience praying with your healthcare provider
(1 = Strongly Agree, 2 = Agree, 3 = Neither Agree nor Disagree, 4 = Disagree, 5 = Strongly Disagree)

1. I felt comfortable praying with my healthcare provider
2. I felt the boundaries of the patient-practitioner relationship were compromised when my healthcare provider asked if they could pray with me
3. I benefited from praying with my healthcare provider

Q19 How did having a healthcare provider pray with you affect your relationship with him/her? (select all that apply)

- ☐ Increased trust
- ☐ Strengthened relationship
- ☐ Built rapport
- ☐ Hurt the relationship
- ☐ Decreased trust
- ☐ Other

Q20 How did receiving prayer from a healthcare provider affect your life? (select all that apply)

- ☐ Resulted in healing
- ☐ Brought peace
- ☐ Improved overall well-being
- ☐ Brought anxiety
- ☐ Other

Q21 Do you have any additional comments regarding your experience of prayer with your healthcare provider you would like to contribute?