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Empathy, Religious Affiliation, and the Growth of Osteopathic Medicine

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Acceptance of Senior Honors Thesis

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Abstract

A key distinction of Doctors of Osteopathic Medicine (D.O.s) is their recognition of each patient as a whole person rather than just addressing his ailment. This focus previously highlighted physical manipulation over medications; however, the osteopathic profession has evolved significantly over the years. As this field is no longer identified by its original rejection of pharmaceuticals, other original principles of osteopathic medicine have impacted the growth of the field. The data collected from surveyed patients indicated that many osteopathic patients and physicians have religious backgrounds, and there is a widespread emphasis on psychological integration. The increased number of patients is largely due to the increased prevalence of osteopathic physicians, with growth of the field supplemented by good experiences and recommendations.

Keywords: osteopathic medicine, empathy, religion, OMM

Empathy, Religious Affiliation, and the Growth of Osteopathic Medicine

Osteopathic Medicine

Founding

The practice of osteopathic medicine began in 1874 after Dr. Andrew Taylor Still, M.D., lost his three sons to infectious complications due to injury during the Civil War. This event prompted Dr. Still to realize that conventional medicine alone was not enough to promote proper health. After much research, he concluded that all the body's systems are interdependent on each other. If stimulated properly, often manually through what is now known as osteopathic manipulative medicine (OMM), the body could more easily maintain homeostasis on its own. Thus, early osteopathic medicine was opposed to pharmaceuticals in favor of preventative measures ("A brief history," n.d.).

Distinguishing Factors of the Osteopathic Profession

The stigma associated with doctors of osteopathic medicine, both in the US and other countries, often stems from the confusion with osteopaths, a term used to denote unqualified healers with no professional medical training ("Difference between U.S.-trained osteopathic physicians," n.d.). While it is true that original osteopathic medicine focused more on physical manipulation than on drugs, the prescribing of medication has been increasingly accepted by the osteopathic profession. Many people, however, are still unclear about the differences between Doctors of Osteopathic Medicine (D.O.s) and Doctors of Allopathic Medicine (M.D.s). D.O.s and M.D.s have equal rights in the United States (Gougian & Berkowitz, 2014). This includes going into any specialty, prescribing medication, and performing surgery. It is still slightly easier to gain entrance into some osteopathic schools, as many of them are relatively new. The profession is also not as

popular as allopathic yet, since it is only recently respected, so entrance tends to be less competitive. The actual training, however, is comparable between the schools (Gougian & Berkowitz, 2014).

Graduating allopathic students generally take the US Medical Licensing Exam (USMLE) exam before entering residency, while osteopathic students must take the Comprehensive Osteopathic Medical Licensing Examination (COMLEX). Though the COMLEX is required, graduating osteopathic students may still choose to enter an osteopathic or allopathic residency. Some allopathic residencies, however, prefer to have a USMLE score; in this case, the osteopathic student may choose to take both exams. Both types of residencies are viable options for the D.O. student, as they teach the same general material. To emphasize the similarity in training and overall equality between M.D.s and D.O.s, by June 2020, all allopathic and osteopathic residencies will be accredited by the same organization, the Accreditation Council for Graduate Medical Education (ACGME). The osteopathic and allopathic professions will remain distinct by their board exams, but the merger of residency accreditation will likely dissipate remaining stigma and allow for a more even distribution of students in each type of residency (American Osteopathic Association, n.d.-b).

The key difference in the practice of D.O.s versus M.D.s, however, is D.O.s' focus on the whole patient rather than just the ailment (Evren, Talwar, & Teitelbaum, 2014; Hasty, Snyder, Suciu, & Moskow, 2012). OMM, also known as osteopathic manipulative treatment (OMT), emerged as a result of the whole-person focus and has been effective in the diagnosis, treatment, and prevention of various conditions. In this technique, physicians use their hands to determine positions of various organs and

muscles and, if any is out of place, will proceed to physically move those muscles or joints using “techniques that include stretching, gentle pressure and resistance” (American Osteopathic Association, n.d.-a, paragraph 1).

OMM treatment plans are well known and highly praised among those with chronic pain, as the plans are crafted to specifically address source pathologies, which are commonly overlooked (Kuchera, 2005). One trial compared pain levels of those treated with an analgesic drug with those treated with OMM. Results indicated that OMM is just as effective as medication in the relief of neck pain, and is in fact more effective in the reduction of overall pain intensity (McReynolds & Sheridan, 2005).With the “body as a unit” viewpoint, it is typical for a D.O. to correct an ailment in one part of the body that was causing pain in another part (Davidson, 2008, 87). If the body systems were not thought of as interdependent, this sort of referred pain would be seemingly unrelated to the visible problem.

OMM is a primary feature of the osteopathic profession. Over 200 hours of training in this area set D.O.s apart from M.D.s, as the rest of the coursework is essentially the same between the medical schools. D.O. students’ interest in OMM typically declines as schooling goes on, yet it has been shown that enhancement programs with more exposure and one-on-one teaching greatly improve interest (Draper, Johnson, Fossum, & Chamberlain, 2011; Volokitin & Ganapathiraju, 2017).

The Osteopathic Oath succinctly encapsulates the goals of osteopathic doctors in patient relationships. It speaks of the desire to be both physician and friend to each patient. The oath also has the doctors promise to do all they can, within their abilities, to heal (“Osteopathic oath,” n.d.). All the while, they are to be “keeping in mind nature's

laws and the body's inherent capacity for recovery" ("Osteopathic oath," 2). In this reminder of the holistic perspective and the body's innate abilities, the oath remains faithful to the molding principles of Dr. Andrew Taylor Still ("A brief history," n.d.; "Osteopathic oath," n.d.).

Implications of Psychological Focus of D.O.s

Empathy and Religion. Empathy is a defining feature of all doctors but specifically of osteopathic physicians. Many sources have examined the benefit of proper socialization in medical school and high empathy levels in relationships with patients (Gevitz, 2010; Harter & Krone, 2001). Socialization with peers, mentors, and patients is an important part of physician training. This socialization gives the prospective doctor confidence in his or her career and identity, which increases effectiveness. D.O. students have often cited Standardized Patient experiences as significant in their socialization, as it reminds them of their holistic focus (Harter & Krone, 2001). They are trained in these sessions to focus on the whole person rather than just what seems to be wrong. As the socialized D.O. is more likely to consider all aspects of the patient before prescribing a medication, the patient can have greater faith in his doctor's diagnosis and treatment plan.

Increased empathy levels of doctors have also been seen to improve patient trust and outcome. This was demonstrated by giving patients with similar diabetic conditions the same treatment, with the only difference being the doctor administering this treatment. Doctors who scored higher on the Jefferson Scale of Empathy had far more success with positive patient outcomes (Hojat, Louis, Markham, Wender, & Gonnella, 2011). While this study is not specific to D.O.s or M.D.s, the empathy principle remains an important element to practices in both fields. It has been shown that M.D. students

exhibit a decrease in empathy by their third and fourth years of schooling, lending to a more robotic, less personal relationship with patients if the trend continues. D.O. students do not show this steady decrease in empathy levels. Though the empathy levels seem to start a little lower in first and second year D.O. students, this level is maintained throughout schooling, while the empathy levels of M.D. students steadily drop. Thus, osteopathic medicine may be a more effective route of care if these physicians have greater empathy and their patients in turn trust them more than a previous M.D.

The holistic focus of D.O.s was also shaped by religious inclinations. Dr. Still, the founder of osteopathic medicine, was also a Presbyterian minister, and believed strongly in the relationship of the spiritual and physical. He referred to man as triune: a being consisting of a physical body, a spiritual body, and a mental aspect (Still, 1902). This unification of parts contributed largely to his whole-patient philosophy. In 2002, a proposition of tenets for osteopathic medicine was published by Dr. D'Alonzo and colleagues. These tenets follow directly from the teachings of Dr. Still, and one in particular states:

> A person is the product of dynamic interaction between body, mind, and *spirit*. The human body functions as a unit, integrated such that no part truly operates independently. Alterations in the structure or function of any one area of the body influence the integrated function of the network as a whole. A comprehensive approach recognizes the integral roles of body, mind, and *spirit* in health and disease. (D'Alonzo et al., 2002, 64)

Recent studies show that about 90% of patients with serious afflictions turn to religion as part of their coping mechanisms; 40% of participants even went as far as to

say that their religious beliefs were all that keep them going throughout their periods of sickness. Due to the origin of the osteopathic practice and corresponding philosophies, D.O.s should be relatively comfortable with integrating each patient's spirituality into his treatment plan. Some patients have previously expressed that they chose D.O.s because the holistic approach of osteopathic medicine complies better with their belief systems than the standard allopathic approach. Individuals that are cautious of medication or surgery might find comfort in D.O.s' support and recommendation of OMM before those other options. Since patients may choose this route of medicine because of religion, it is also possible that some prospective medical students may choose to become D.O.s for the same reason. They may wish to be more intimate with their own belief systems and those of their future patients (Reeves & Beazley, 2008).

Growth and Reasoning. Numerous studies have indicated the rise of Osteopathic Medicine in recent years, with 65% more practicing now than ten years ago (The DO, 2017). Since 1986, this number has increased by an astounding 276% ("Osteopathic Medical Profession Report," 2016). This is likely in part due to more patients becoming reluctant to take any medication prescribed to them, and an increased number of D.O. schools becoming available for students to enter.

Not many articles have examined the whole-person perspective that D.O.s take toward their patients, or to what extent the original principles of osteopathic medicine are still incorporated into their practice. This alternative focus could be affected by the aforementioned difference in D.O.s' empathy levels. The maintaining of initial empathy, in contrast to the drop of the allopathic empathy levels, may also be related to the D.O.s' decisions to matriculate to this particular path over the alternate in the first place. The

differences in doctor-patient relationships and other defining characteristics of osteopathic medicine are potential reasons for such rapid growth in the field; they could all contribute to reasons that more students are choosing to become D.O.s and more patients are choosing to go to an osteopathic physician rather than an allopathic physician (Kimmelman et al., 2012).

While many studies are able to give statistics of growth, there is presently a lack of studies to examine the causes of this growth. An increase in the number of both practicing D.O.s and D.O. patients, combined, account for the overall expansion; thus, answers from both of these groups could define specific reasons the field has grown to be almost as popular as its allopathic counterpart. From research previously performed, it seems there should be an evident link between spirituality and osteopathy, potentially seen both in the doctors' choices to attend D.O. school and in patients' decisions to seek out such doctors. Results should indicate high empathy levels of D.O.s, accounting for much of the draw to the profession. Results should also give statistics on the use and efficacy of OMM by both patients and doctors.

The hypotheses being examined were that use of OMM would be a defining characteristic in the practice of osteopathic medicine, that both groups would greatly value psychological integration, that a majority of D.O.s and D.O. patients would be religious, and that the D.O.s would be highly empathetic and trustworthy. Additionally, all of these factors are proposed to have a role in the recent growth of osteopathic medicine.

Method

Participants

Two groups of individuals account for the data from this present study. The first and most prominent group is patients of D.O.s., and the second group is practicing D.O.s. Both offer unique insight into the current field of osteopathic medicine. An additional group of D.O. students was initially going to be included, but ample participants could not be obtained. The one response given by an osteopathic student was disregarded in data analysis.

Materials

All participants took surveys with both objective and free response questions. Surveys were developed and approved by Liberty University's Institutional Review Board before distribution, along with a consent form, which all participants were required to mark as read before beginning their surveys, and a request form to invite prospective participants to join the study.

For patients, the survey was given to assess their knowledge of osteopathic medicine and to determine how important their doctors' holistic approaches to medicine were to them. Patients' answers to the questions gave insight to their D.O.s' levels of empathy, spiritual concern, and other defining facets of osteopathic medicine, like the emphasis on the mind, body, and spirit together, and the body's innate healing abilities. Answers were used to assess how well each of these aspects was being incorporated into practice, according to the patients' experiences. The surveys also indicated why the patients began seeing a D.O. to begin with, how they felt about the frequency at which

they were asked about their mental and spiritual health, and how much they trusted their doctors.

The surveys given to D.O.s examined their reasons for entrance into D.O. schools instead of M.D. schools. Previous studies have briefly alluded to this question, but not explored it in relation to empathy, religion, and the original viewpoints and values of osteopathic medicine (Olufowote, 2014; Teitelbaum, Ehrlich, & Travis, 2009). To assess this, the questions were designed to determine any religious link to the choice, belief system if applicable, current empathy levels, and psychological integrations. All participants, both patients and doctors, were also questioned specifically about their experiences with OMM; for doctors, use of and personal success with OMM was assessed, while for patients, experience and results with OMM were recorded. All of these results were combined in an effort to explain the recent growth of the field of osteopathic medicine.

Procedures

Recruitment. Participants meeting the criteria of D.O. patient were identified by making print copies of the survey available in a D.O. office's front desk in a Michigan hospital, where patients were given the opportunity to participate if they desired. Participants had to indicate that they read the consent form for their responses to be included, and patients under the age of eighteen were excluded from the study. Some of the patients who took the survey from this location were also practicing D.O.s (six) or D.O. students (two), but all answered according to their time as D.O. patients. Twenty-six total responses were recorded for the patient group. Many practicing D.O.s were contacted individually by email, according to personal connection and connection to

members of the thesis committee, and invited to participate in this current study. Out of those invited, five doctors chose to participate in the study.

Analysis, Data from both subsets of participants were input into Google Forms, which automatically generates summary charts of results for each question. The combined results were not able to be seen by those participating in the survey, but only by the survey creator. Data were also input into Excel to create more appropriate charts and graphs; all figures shown are original. Results were then additionally analyzed by both qualitative and quantitative analysis techniques. Grouping and pattern detection was performed for individual participants, along with intersection between participant responses; consistencies and inconsistencies were searched for between the subsets of participants.

Results

Patients of Doctors of Osteopathic Medicine

Beginning their osteopathic preference. In this group's survey, participants were first asked when they became patients of D.O.s; of the twenty-six participants, six did not answer this question, and one responded that he was unsure, and one responded "sometime in high school." Of the eighteen responses left, four had always been patients of a D.O., whether since birth or since they began seeing their own doctor. One patient began in 1980, and the remaining thirteen all began seeing a D.O. during or after 1998 (Figure 1). Thus about 72% of the patient respondents began within the last twenty years.

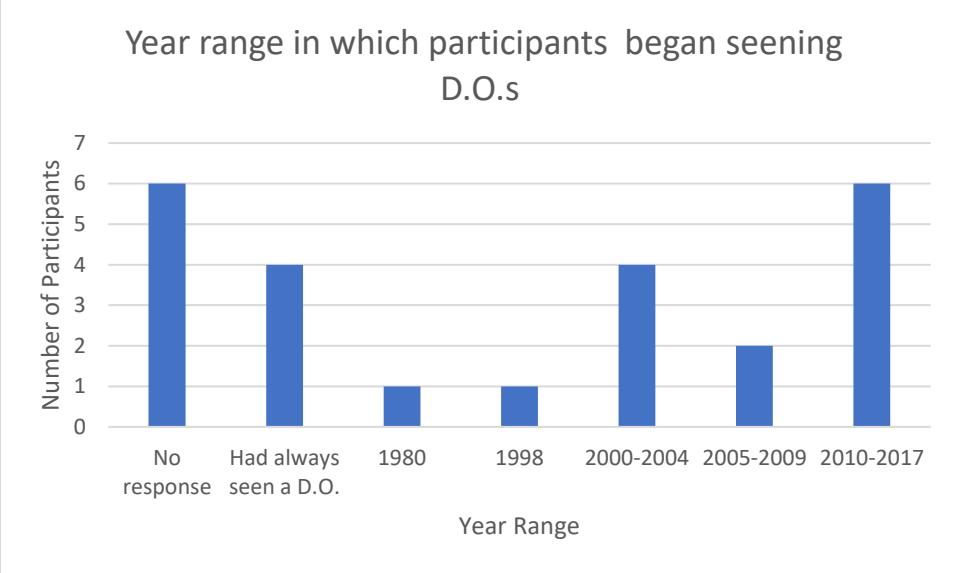

Figure 1. Patients that started actively seeing a D.O. for each year range.

The patients were then asked the reason they began seeing a D.O. Three patients did not respond. Ten respondents began seeing a D.O. out of convenience, and in addition, one responded that he began because a D.O. took over his former M.D.'s practice, which could also qualify as convenience. Five respondents stated their reason for choosing a D.O. was prior personal experience, and five as recommendation from others. Two respondents had always seen a D.O., and one of them also cited personal experience. Percentages of each response are indicated in Figure 2.

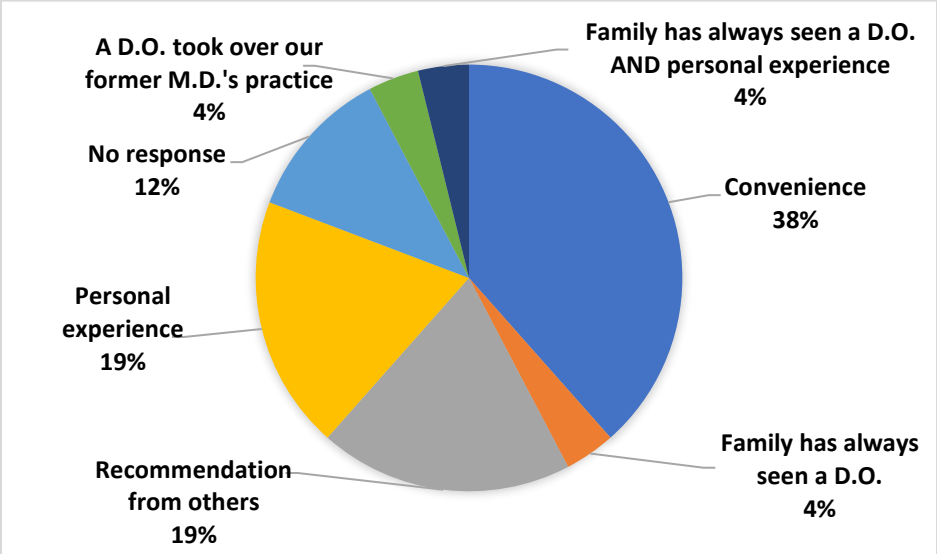

Figure 2. Reasons patients began seeing a D.O.

Difference in care. The patients were next asked if they had noticed a difference in care between M.D.s and D.O.s. Three participants did not respond. Two strongly preferred D.O.s, such that they remarked that they would go to a different D.O. rather than an M.D. if they experienced problems with their current doctors. Four respondents said they did notice a difference, two of which specified this difference as OMM. Sixteen of the participants cited no difference between D.O.s and M.D.s. The last remaining participant said he has not noticed a difference, in that he has had similar care between the types of doctors, but that D.O.s are "more empathetic and willing to listen to the patient."

The next questions addressed OMM. Two participants did not respond, and one was unsure. Twelve participants said their D.O. does not generally practice OMM on them. Ten said their D.O. does, and one specified that his Family Practice D.O. does, which was counted as a yes. Despite this almost-even split between respondents' current doctors practicing OMM or not, seventeen participants indicated that they had been

treated with OMM at some point, and when asked about efficacy, 65% of these said that OMM was more effective for them than medication had been (Figure 3).

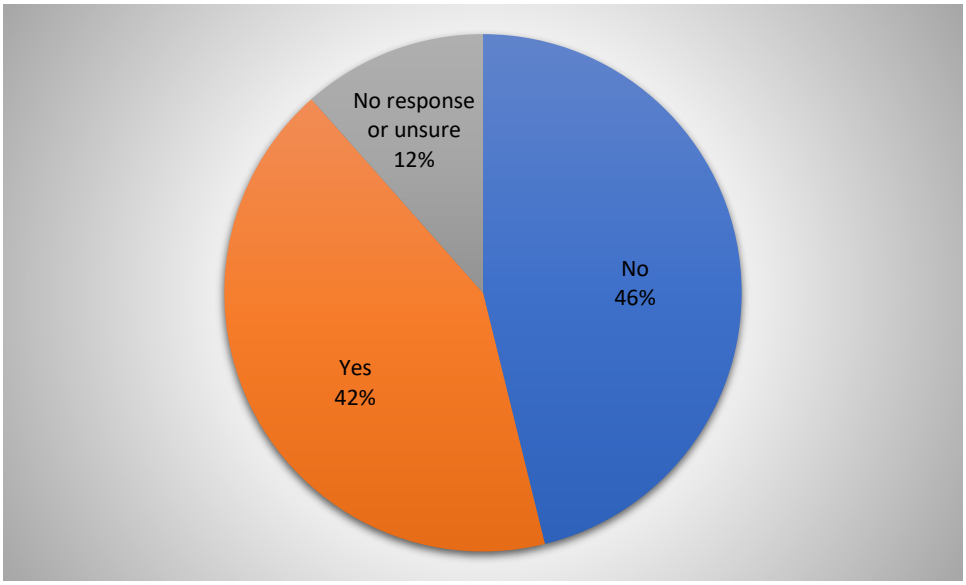

Figure 3. Patient responses as to whether or not their D.O. practices OMM on them.

Psychological aspects. The next questions in the survey asked patients if their D.O. addresses psychological issues ("including depressive symptoms, suicidal thoughts, and other mental health difficulties") in their well-checks. About 79% of respondents answered yes. All participants were then asked how important it is to them that their doctors perform a brief psychological evaluation during well-checks, and that their psychological health is seen as a vital part of overall wellbeing. Individuals were asked to quantify this importance on a scale of one to five, with one being not at all important, and five being extremely important. Exactly 50% of the respondents indicated that psychological consideration is extremely important to them, while the rest of participants were spread out in response (Figure 4).

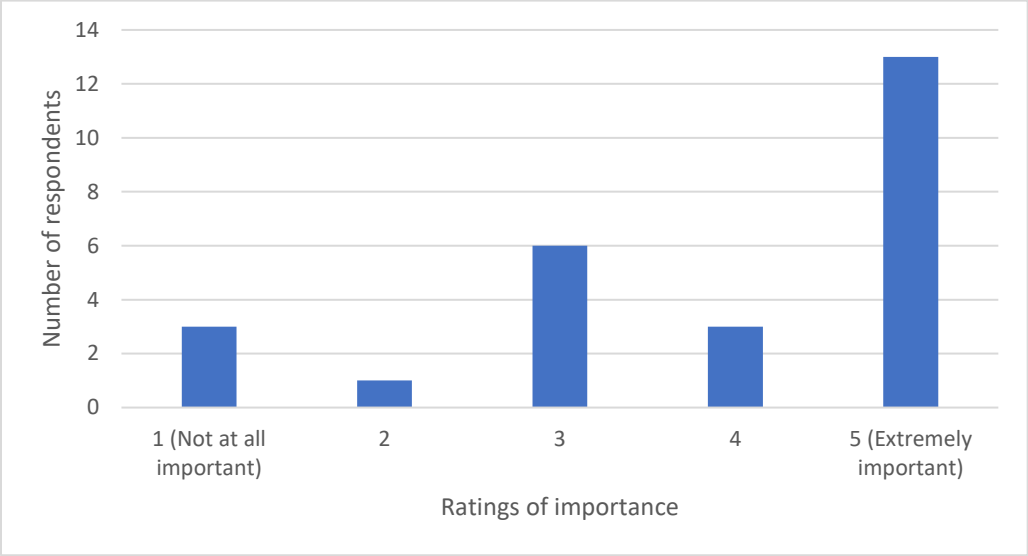

Figure 4. Patients' ratings of the importance of psychological integration.

Spiritual aspects. The next three questions pertained to religion/spirituality. First, participants were asked if they held any religious affiliations. One participant did not respond. About 27% said they had no affiliations, and 69% said they did have religious affiliations. Though they were not asked to specify, one participant included that he was Christian, but not affiliated with a church; his response was counted as a yes for religious affiliation. Patients were then asked if their doctor typically incorporates spiritual wellbeing into well-checks. One again chose not to respond. Excluding this one, 61.5% of individuals said no, and 34.6% said yes.

As a follow-up question, participants were asked to quantify how important this spiritual checkup was to them. The question asked how much they would prefer their doctors to inquire about spiritual wellbeing. On a scale of one to five, one represented "not at all," and five represented "as much as they check on physical wellbeing" (Figure 5). The most common response (nine out of twenty-six, or about 35%) was that patients did not want spiritual aspects incorporated into their well-checks at all, while the

remaining 65.4% of respondents said they would like their spiritual health monitored to some extent. In addition, 88.5% of the respondents answered that they do believe their spiritual wellbeing can affect their psychological and physical wellbeing.

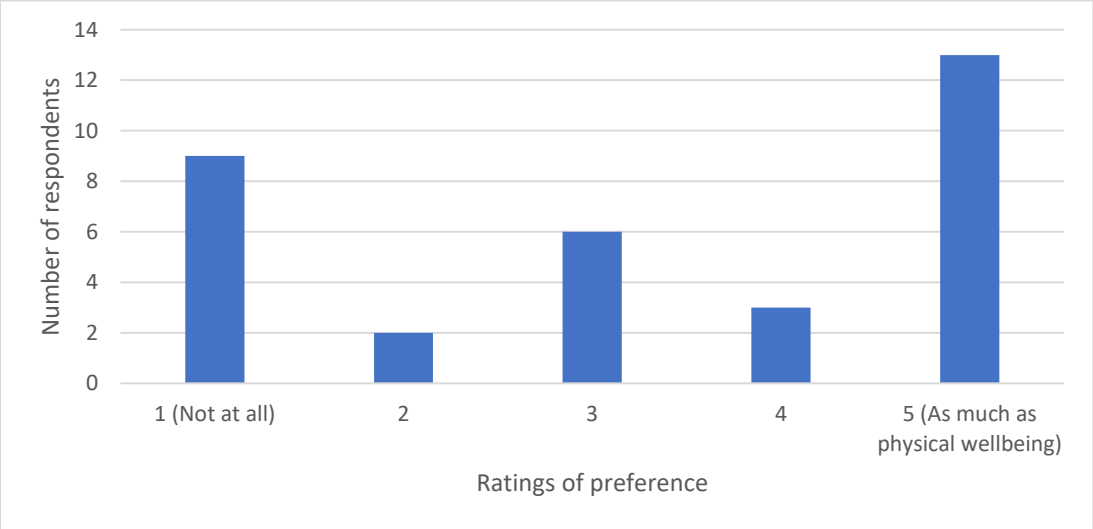

Figure 5. Patients' ratings of their preferred degree of spiritual integration.

Empathy and trust. The last two survey questions pertained to the patients' evaluation of their D.O.'s empathy levels and trustworthiness. Patients quantified their doctor's empathy on a scale of one to five, with one being low empathy and five being empathetic. Most (57.7%) felt their doctor was very empathetic, and all marked at least average levels (Figure 6). They were then asked to perform a similar task for their level of trust toward their doctors. On this one to five scale, one represented no trust, and five represented completely trust. Most patients (73.1%) completely trust their D.O. (Figure 7). All patients in the group responded to both questions. The most common answer in both questions was five, and none of the patients marked low empathy or no trust.

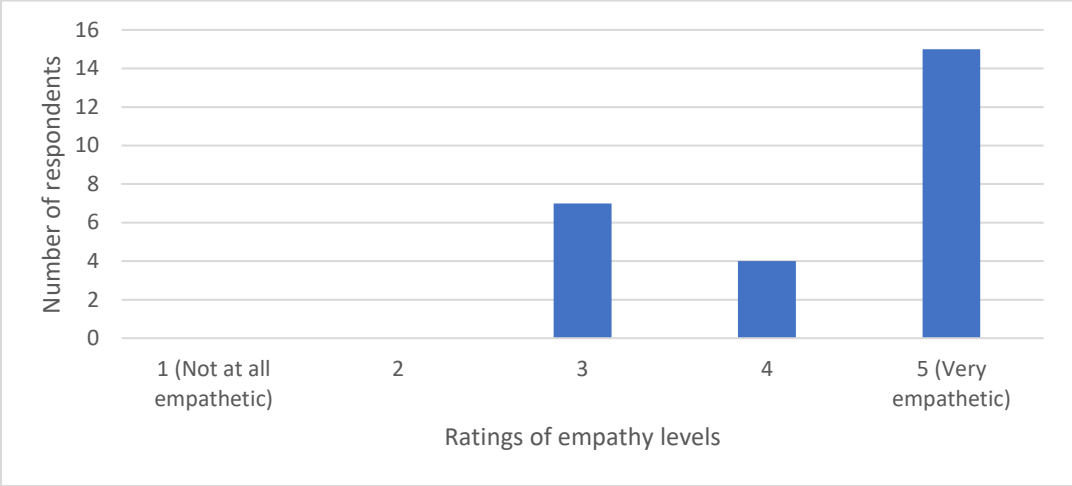

Figure 6. Patients' ratings of their D.O.s' empathy levels.

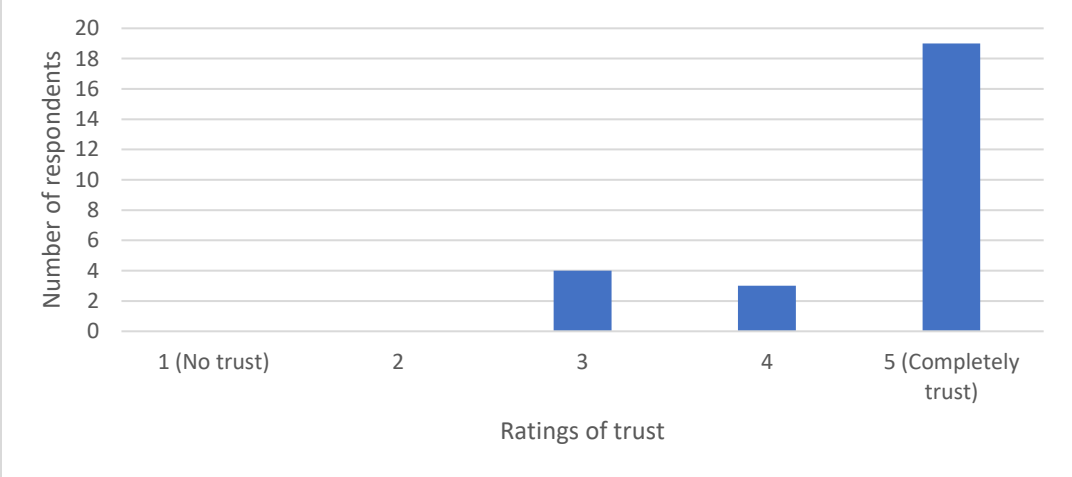

Figure 7. Patients' ratings of trust in their D.O.s.

Doctors of Osteopathic Medicine

Becoming a D.O. Doctors participating in the survey were first asked if they always wanted to be a doctor, to which 60% answered yes. They were then asked why they chose D.O. over M.D. All five participants marked different answers. One said osteopathic school was always his goal. One said it was easier to get into D.O. school. A third said his decision was based on the fact that the school he wanted to attend happened to be an osteopathic school. The fourth marked convenience as the reason, and the fifth

stated that he chose D.O. because an M.D. encouraged him in that direction, citing their holistic nature and training as driving forces. Of the doctor respondents, 60% were also previously D.O. patients.

OMM. Doctors were then asked about their experiences with OMM. First, when asked if they felt competent in its execution, four participants responded that they did, and the other said that he did upon graduation from medical school, but that he is out of practice now, so less confident. D.O.s were then asked how often they use OMM in practice. Three participants responded that they rarely or never use it, while the other two said about once a week.

Psychological aspects. The doctors were also asked the same questions as the patients in relation to psychology. Three of the five doctors said they do regularly ask about the psychological wellbeing of their patients, including depressive symptoms, suicidal thoughts, and other mental health difficulties, while the other two said it depends on the situation. Most who responded that they do regularly incorporate psychology also rated psychological wellbeing as extremely important (a five on the quantified scale); overall, 60% rated psychological wellbeing as a four on the scale, and 40% chose five.

Spiritual aspects. All five participating doctors responded that they have some religious/spiritual affiliation, but only three of them (60%) believe that their affiliation in some way contributed to their decision to become a D.O. Doctors were subsequently asked to estimate how many hours of training in spiritual matters they received during their years of schooling. One responded with twenty, and another with fifty. The third remarked that it was difficult to summarize, but estimated about one hour a week in school, and more outside of it. The last respondent said about six credit hours. Doctors

received the same one to five scale as patients to rank the importance of spiritual matters, with one being not at all important, and five being as important as physical matters. On this scale, 60% of the doctors marked spiritual matters as a five, and the others chose four. All five agreed that spiritual aspects can affect a patients' psychological and physical conditions, yet only 40% said they regularly incorporate spiritual wellbeing questions into their well-check examinations (Figure 8).

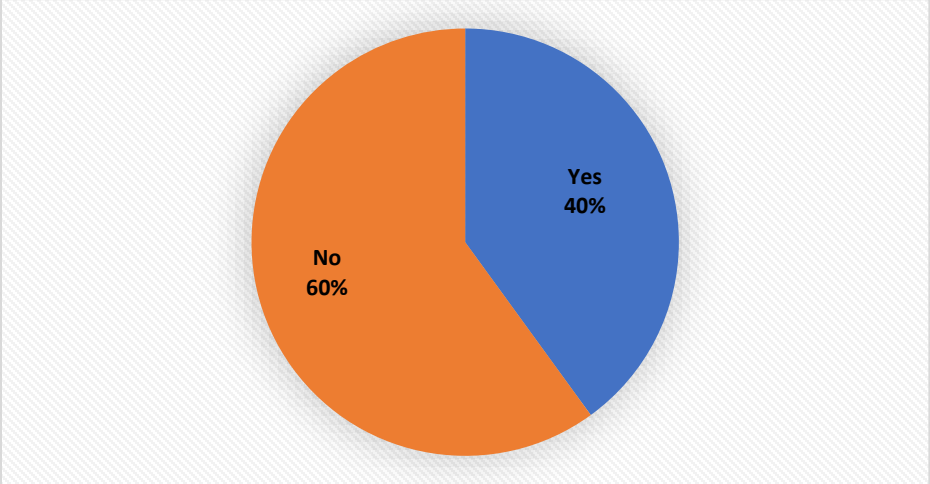

Figure 8. Doctors' responses to whether or not they include spiritual wellbeing in checkups.

Empathy. Doctors were next asked about their personal empathy levels. On the scale of one to five, three doctors marked themselves as fives, or very empathetic. The other two chose fours. They were next asked if they believe this number to have changed over the years of schooling and practice. To this question, two doctors responded that their empathy levels have been impacted positively, thus their empathy levels have increased. Another responded that his empathy was impacted in that he realized in his practice how much whole families are affected, he but did not mention whether he considered this a positive or negative overall impact. A fourth responded that he believes

his empathy has decreased since he has been in practice. The last responded that, although the empathy is utilized differently now, and certain time constraints have been added, he does not believe his empathy level has changed. Though expressions of his empathy have to be somewhat different now than in his pre-medical years, the feeling remains the same to him.

Discussion

Increase in New D.O. Patients

With the rapid growth of osteopathic medicine occurring relatively recently, it is fitting that 72% of respondents have become D.O. patients just within the last twenty years. It was the goal of this study to assess explanations for this growth. First, by determining why patients are choosing D.O.s more frequently, and second, by understanding why prospective doctors becoming D.O.s rather than M.D.s. Because only five doctors participated in the study, conclusions from this study are tentative.

Besides an aversion to pharmaceuticals, the defining and original features of osteopathic medicine were OMM and the holistic perspective of the patient as body, mind, and spirit. When asked whether they noticed a difference in care, most patients participating in this study (16/23, or 69.5%) responded that they did not. This result is partially accounted for by the fact that about 52% of the patients also responded that their D.O. does not utilize OMM, osteopathic medicine's most easily distinguishable characteristic. Of the patients that did notice a difference in care between D.O.s and M.D.s, specific mention was made of OMM and holistic measures being taken more often by D.O.s. These reasons were also given by some as their reasons for seeking D.O. physicians in the first place.

Despite this large percentage not regularly receiving OMM, seventeen of the patients in the study had, at some point, experienced it. Of those that had received it in the past, 76% responded that OMM was more effective than medication for them. Because of this percentage, it is likely that some of these patients sought out or stayed with their current D.O. because of the effectiveness of OMM. The greater effectiveness in pain relief is also consistent with results in previous literature (McReynolds & Sheridan, 2005).

Another reason that patients may not notice a difference between being under the care of a D.O. and an M.D. could be that the osteopathic physician's point of view does not fully fit the holistic integration of mind, body, and spirit that is characteristic of their branch. This study found that 79% of patients said that their doctor does regularly incorporate mental and/or psychological health evaluations into their well-checks; however, only about 35% said their doctor checks on spiritual health. The percentage of doctors checking on psychological aspects of their patients is commendable, while the percentage of doctors integrating spirituality as an important part of the patient's whole is lower than expected. It is possible that this neglected aspect of spirituality has somewhat affected the holistic perspective. However, only 23% of patient respondents considered spiritual aspects as equal in importance with psychology and physiology. About 35% preferred their spiritual health not be checked on at all, though around 69% of the patient population said that they had religious affiliations, and almost 89% believe that the mind, body, and spirit affect each other.

From these data, it seems osteopathic medicine is not likely growing because of religious integration alone. Though many respondents claimed religious affiliations, and

it is possible that religious roots had a subconscious effect on their choice of holistic medicine, the most commonly selected choice on how much the patients would prefer their spiritual wellbeing to be checked on was “not at all.” While this does mean that 65.4% did want spirituality incorporated in some fashion, with only 35% of these patients’ D.O.s checking on their spiritual health, it seems spirituality would only contribute a small amount to the growth of the field. The psychological integration of osteopathic physicians seems to have played a larger role. As 50% of the participants ranked psychological aspects of health as “extremely important,” while only 11.5% ranked them as unimportant, the data indicating a high percentage of D.O.s including psychological evaluations would, in part, explain why these individuals have recently started and continued going to an osteopathic physician.

Another aspect of care that was taken into account was how the patients felt about their doctors’ empathy and trustworthiness. Over 57% of patients felt their doctor encompassed the greatest amount of empathy on the quantified scale. About 27% marked a 3, or “average,” while the rest fell in between. To the next question, 73% of patients replied that they completely trust their doctors. As seen in these percentages, some patients felt that their D.O.’s empathy was not as high as it could be, yet still marked that they completely trusted their doctor. No patient, however, said that he trusted his doctor at a number less than he marked for his doctor’s empathy level. Most participants chose the same number on the scale to represent both their doctors’ empathy, and how much they trusted them. Data from this study were therefore consistent with data from previous studies indicating that patients’ trust of their physicians increases as empathy increases.

Although 69.5% of patients said they did not notice a difference in care, 19% of patients in the study said they became patients of D.O.s because of personal experience. It is likely that this was because a difference was noticed between the D.O. and their former doctor, and some of these responses also included results with OMM. Another 19% said that a recommendation from others was their reason for choosing a D.O. Similarly, it is likely that, for some, this recommendation inspired the decision to switch because these patients noticed a difference between the care of their friend who was making the recommendation and the care of themselves. The majority patient respondents (11/23, or 38%) selected convenience as their reason for choosing a D.O., implying that either location was key, or the greater incidence of D.O.s in practice made osteopathic medicine a more feasible option than allopathic.

Increase in D.O.s

If a significant part of the recent increase in new D.O. patients is due to the increase in osteopathic physicians, the next logical point to address is the data surrounding the reasoning for the physician increase. It is first important to mention that the data received from practicing D.O.s was consistent with the patient data in several areas. First, in that 60% of doctors said they regularly ask about psychological issues, and the other 40% marked that it depends on the situation. This fits with the patient data indicating that about 79% of the patients' doctors did inquire about their psychological health. Secondly, the doctors' use of OMM was also consistent with patient response, as 60% of the doctors said they rarely or never use it, and about half the patients said their doctors do not use it. Lastly, about 60% of respondents in both subsets also remarked that they do not ask, or get asked, about spiritual health during their well-check exams.

As all five participating doctors selected or wrote in different answers for their reasoning in becoming a D.O., a majority or most common reason cannot be determined. However, all five doctors in the study did have some religious affiliation, and all five believed that the psychological, spiritual, and physical aspects of a patient could affect one another. All of the physicians rated themselves as either a four or five on the one-to-five empathy scale, and only one experienced the negative empathy impact that is characteristic of M.D.s according to past literature. Three of the five had previously been D.O. patients themselves, and the one doctor who marked that osteopathic medicine was always his goal was one of these three, so it is likely that previous experience with his own doctor is what drove him to that decision. Thus, though there is not one reason that stands out among the doctors, there is a link between the choice of osteopathic medicine, religious background, and psychological importance to this particular set of osteopathic physicians.

With all of this information, it is still not conclusive why this field has grown so exponentially in recent years. The characteristics originally setting D.O.s apart are their different perspectives on health, including mind, body, and spirit, and their use of OMM as a first line treatment. However, as seen from both doctor and patient responses, OMM is not as much a defining feature anymore, as at least 50% do not regularly incorporate it. When it is used, however, it does make an obviously positive impact on patients, in their healing and ability to differentiate osteopathic medicine from allopathic. In relation to the holistic mindset, psychology is well integrated, but the spiritual aspect spoken of in the tenets of osteopathic medicine does not seem to be of as much concern anymore.

The creation of more osteopathic schools, which also rests on the growing interest in osteopathic medicine, is likely contributing to more prospective doctors becoming aware of this alternate route of medicine and choosing it because it fits with their values more, it is more convenient for them, or because the school to which they were accepted happened to be osteopathic. Before 2000, there were only nineteen osteopathic schools in the US; now there are thirty-five (American Association of Colleges of Osteopathic Medicine, 2017). The increased acceptance of osteopathic medicine seems to have impacted the number of schools, which has increased the number of practicing osteopathic doctors, and therefore expanded its patient base.

Limitations and Future Research

This study consisted of a relatively small sample size. Gathering more information from both more patients and more doctors would allow an increase in the number of conclusions that can be drawn. Age was not asked on the surveys in this study, but in future surveys, it would be a helpful addition, as generational correlations could likely be seen in the evolution of osteopathic medicine becoming more similar to allopathic. In future studies, there will likely be significantly more patients who cite that they have always been a patient of an osteopathic physician, as the increase has been rapid in the last 20 years. Most patients in this study had been to both M.D.s and D.O.s, as only a few indicated otherwise. A noteworthy portion of them had starting reasons other than convenience, and others, even that did mark convenience, had good experiences that have kept them D.O. patients afterward; however, the equally significant amount that selected convenience as their initial reason for becoming a D.O. patient, and the high percentage that said they did not find a difference in care between D.O.s and

M.D.s, points to the significant increase in the prevalence of osteopathic physicians, more so than appreciation of the alternate philosophy, or prior research done by the prospective patient.

Because of this, more survey responses specifically by doctors, indicating their primary reasons for becoming D.O.s, would increase the validity of the study. While the responses by the participating doctors are not to be discounted, more responses would allow for the major reasons for going into osteopathy to be determined. Future studies could also include data from M.D.s to compare characteristics common to both types of doctors, like empathy levels and psychological integration, to see if there is a collective difference between the people that choose to become M.D.s or D.O.s. Responses from patients of M.D.s could also explore patients' feelings about their doctors' empathy levels and trustworthiness to see how that compares to data from this study of D.O. patients.

As this study was unable to obtain student responses, future studies including students as a separate population would be helpful. Responses could indicate if students entering and going through osteopathic school now differ from previous graduates in any fundamental way or determine if there is now a different mindset in the teaching of osteopathic medical schools. Surveys by graduates over a timeline could be helpful in determining if or when values like religious integration became of less importance than psychological wellbeing in the schooling of these osteopathic physicians. Although many conclusions were drawn from this study, there is much more that future research could be helpful in exploring and determining in the current field of osteopathic medicine.

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