IT GOES WITHOUT SAYING: INCREASING CULTURAL COMPETENCY OF ETHNIC GROUPS IN MICHIGAN

by

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DEDICATION

For my fiancé, for keeping me sane with support and multiple read throughs. To my advisor, Dr. Kalaczinski, for creating the spark and trusting me throughout this project. For anyone that has read, reread, and then read again this paper to make it the best it could be, thank you. And, of course, to my kitties, for providing fluffy distraction.

ABSTRACT

Background: The purpose of this literature review is to investigate the cultural norms of the largest ethnic minority groups in Michigan and to identify the best practices for providing culturally competent eye care to patients within these groups in order to better provide for their optometric healthcare needs. **Methods**: Databases used for information gathering included PubMed, JSTOR, and ProQuest. Articles needed to be reputible and no more than 10 years old, with one exception. A resource was declared reputible if from a source with proven and known expertise in the content area. Reputible websites and one textbook was employed as well. **Results:** Information was gathered and organized relating to the best practices for the major ethnic groups in Michigan. An instructional pamphlet was created to condense these guidelines as a guick reference for busy practioners. **Conclusions**: This paper outlines guidelines for the largest ethnic groups in Michigan to assist the eyecare practitioner in their care of a culturally diverse patient. Application of these guidelines should be done cautiously, as acculturation and cultural identification levels vary amongst patients. The information presented in this paper is meant to be used as a starting point rather than a guaranteed assumption.

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INTRODUCTION

More than one third of the United State's population is composed of ethnic and racial minority groups, a number which will continue to increase until 2043 when minority groups are estimated to become the majority of the population.⁵³ These populations come from different cultures, impacting their perceptions on health, such as their justification of illness, their willingness to express symptoms and seek help and treatment choices and compliance.¹ In order to provide the best care possible for these patients, practitioners must be cognizant of these cultural differences and their impact on the process of diagnosis and treatment. Cultural competency is defined as the "ability of a healthcare provider to communicate with and effectively provide high-quality care to patients from diverse sociocultural backgrounds."² This means that practitioners may need to alter the structure of their treatment plans, eliminating certain medications and including alternative medication use. It also means that practioners should be mindful of nonverbal communication and touch preferences during the examination of a particular patient. For example, asking questions to healthcare providers, even if for clarification, is viewed as disrespectful in some cultures. Discussing possible side effects from a procedure or medication may also be seen as taboo and self-fufiling.¹ In these instances, understanding a patient's background can be helpful in getting an understanding of how much detail a practitioner should go into. Evidence suggests that cultural competency increases trust and understanding between the patient and practitioner, improves compliance of treatment protocols, and reduces health care disparities.² In other

words, it allows the patient to feel comfortable under the practitioner's care, and it allows the practitioner to integrate the patient's health belief system to improve effectivity of treatment.

However, care must be made not to unintentionally stereotype a patient as having similar beliefs or preferences to a cultural group solely based upon their external appearance. Culture is a flexible, ongoing process in a patient's life, resulting in hybrid preferences and opinions of both that patient's background as well as their current day life.³ There is a careful balance between understanding the patient's background and understanding the patient. In order to optimize patient satisfaction and health improvement, this balance must be correctly met.

In this paper, background information will be presented regarding for the most common cultural groups in Michigan, including nonverbal cues, use of alternative medication and therapies, and overall belief systems. Disease that have an increased incidence in these populations which have ocular sequelae will also be discussed, all to better prepare the practioner in taking care of the patient.

METHODS

Many databases were analyzed during information compilation, including Science Direct, JSTOR, PubMed, and SAGE Journals. Google scholar and accredited internet sites were used as well. Accredited sources are defined by this paper as information coming from a source with proven expertise in the discussed topic to increase reliability. Main search terms employed consisted of "cultural competency in healthcare," "what medical providers should know about

cultural norms of specific populations," as well as "healthcare within a specific population." Articles and websites had to be written in the last ten years (2008 onwards), with one exception being an article 14 years old with impeccable information. To ensure accuracy, information was cross referenced to at least one other source for the majority of the data collected. *Multicultural health*, by Lois Ritter, was the only textbook employed in data collection and provided invaluable information throughout the course of this article.

Data was organized into subculture, then further divided by topic, such as general health, examination guidelines, and alternative medication use. It was then integrated with similar findings to increase certainty. Information was only included if it had a direct relation to eye-related examinations. For this reason, folk illnesses, alternative medications, and non-pertaining healthcare practices were discarded for the purpose of this article.

RESULTS

HISPANIC

The term Hispanic was created in the 1970s by the United States Federal Government, in an attempt to unify under one term a group of highly diversified populations.⁵ The classification is based upon cultures derived from the Spanish, composing people of Mexican, Cuban, Puerto Rican, Central/South America and other Spanish origins, regardless of race.^{1,4,5} Based upon the 2013 census, there were 54 million people of Hispanic descent in the United States, comprising 16.9% of the population. It is predicted that by the year 2050, up to 30% of the United States population will be people from a Hispanic culture.^{1,5}

With an increase of Hispanic population comes the increase in conditions found within that population. Hispanic food is typically rich in carbohydrate and saturated fats and eaten to excess during celebrations, as declining food is socially unacceptable. With acculturation many of these traditional meals have been replaced with fast food, adding even more to the unhealthy eating habits. This poor diet combined with a more sedentary lifestyle means American Hispanics often have an increased prevalence of obesity than individuals from their native country.^{6,7} Obesity is closely linked with diabetes and hypertension, and 11.8% of Hispanic patients older than 20 years old have type 2 diabetes. Due to decreased access to health care, Hispanic patients are often diagnosed with diabetes later in the disease process and have a greater risk of complications. Hispanic patients are 50% more likely to die from diabetes than non-Hispanic white patients. However, despite the large mortality rate, the overall mortality rate is still lower than expected based upon genetics, socioeconomic factors and disease progression, which has been termed the Hispanic paradox.^{5,8,9} Oftentimes, it is more affordable and quicker to make an eyecare appointment than it is with other health profressions, meaning optometrists may be initially diagnosing and referring for this condition before it becomes uncontrolled. Liver disease and cirrhosis are also increased in Hispanic patients, despite an overall decreased consumption rate of alcohol. Fewer individuals drink alcohol, but those that do tend to drink to excess and cause higher rates of serious liver complications than in any other ethnic group.¹⁰ While ocular complications of alcohol abuse is rare, it can result in a thiamine deficiency that

presents as bow tie atrophy of the optic nerve.⁵⁴ Inclusion of this knowledge within a differential diagnosis can prove important, as thiamine deficiencies can often time be reversed if caught early.

When the optometrist presents examination results and disease management, patients may desire familial involvement. *Familiso* emphasizes family over the individual, and can be an important in treatment adherence and patient motivation since many Hispanic patients are reluctant to seek and undergo medical attention. It can also slow down the decision making process or cause treatment to be deferred by the family. This could mean if a treatment option is a burden to the family the patient may not undergo treatment. This should be considered for conditions such as amblyopia, in which the entire family unit must understand and agree towards treatment such as vision therapy. Nevertheless, if a clinician neglects *familiso*, issues such as non-compliance, conflicts, dissatisfaction and poor continuity of care can arise.^{4,6}

Amongst this family-centric structure are specific gender roles, such as the matriarch determining when a family member needs to seek medical care for a condition the patient may be neglecting.¹¹ Males are expected to be tough, so they may provide for and maintain the integrity of their family. This concept is called *machismo*, and may prolong disease detection and treatment as going to the doctor is seen as weak. If the male patient is no longer able to work or provide for their family, which occurs with the inability to see properly, they will see a provider sooner.^{1,12,13}

Two terms that Hispanic patients look for within healthcare professionals are *respecto* and *personalismo*. *Respecto* means deferring to the person in the position of higher authority. When a younger doctor is treating an older Hispanic patient, it is expected to be a more formal interaction, at least upon initial evaluation. Over-Familiarity is not appreciated without being earned. This can be demonstrated by beginning and ending the examination with a handshake, and avoiding prolonged, direct eye contact.^{1,5,11,14} Greet everyone in the room, including children, and ask the patient how they would like to be addressed, as their names may be extended through marriages.^{5,7} *Respecto* may also mean patients defer questions or concerns regarding a doctor's treatment recommendations from concern of being disrespectful. A Hispanic patient may nod instead of voicing agreement, or be silent if they disagree or are confused. Allowing for open communication and asking patients to repeat the proposed treatment plancan help alleviate misunderstandings.^{1,9,10}

While *respecto* is important, it must be balanced with *personalismo*, in which the patient expects to develop a personal relationship with their healthcare providers. A healthcare professional that seems rushed or aloof may not only overlook the patient's chief complaint, but also cause dissatisfaction with care provided and ensure the patient does not return for care in the future. Exchanging pleasantries and allowing for closer conversational distance may allow for increased rapport and a more focused exam thereafter. The length of this informal interaction is less important that the quality, and *simpatia*, or kindness, should always be emphasized. Hispanic patients also expect their

doctors to be confident and calm under pressure. While these values are important with all patients, omittance amongst Hispanic patients will result in non-compliance and loss to follow up.^{1,13}

Best practice indicates for a medically trained interpreter to be utilized if an interpreter is required to perform the examination. If unable to fulfill that obligation, a family member of the same gender and of equal authority level should be used, as use of children often flips the position of power.^{1,11,38} If the patient has limited English skills, allow for extra time in the examination and have bilingual handouts, websites, and medical literature on hand to assist a patient in their understanding, and refrain from gesturing when possible.^{4,5}

Hispanic patients tend to be present-focused which may result in them arriving late to an examination. If this occurs, this gesture is not to be insulting but the patient will still expect to be seen and not be rushed during the exam. This tendancy towards living in present time can make the idea of preventative medicine difficult to understand and may require additional education time since the patient will be unable to gauge the benefits of medication use. This may lead to the patient self-discontining their medications.^{12,18,38} Patients may also be anxious when put on a medication, which they percieve to mean their condition is advanced. Families may wish to withhold medical information from the patient to prevent this anxiety or may elect a family spokesperson to deliver the news personally.¹

Many Hispanic patients view health as a balance of physical, emotional, and spiritual energies. Most Hispanics are devout Roman Catholics, believing

health is in God's hands and that pain is a test of faith from previous wrongdoings.^{1,4,11} *Fatalismo* is the belief that an individual cannot alter their destiny of the disease process, which can affect treatment compliance.⁶ 78% of Hispanic patients with diabetes believed they had diabetes because it was God's will, and 81% felt that only God could alter their disease's progression. At the same time, faith can be useful in helping a patient cope with their disease. A sick person may be using prayer, traditional treatments, as well as prescription medications received from a doctor simultaneously.^{6,13}

Many patients use a combination of traditional and modernized medicine, partially due to cost. Approximately 30% of Hispanic patients living in the United States regularly use herbal medicines, based upon Ayurvedic principles that states medicines and diseases have inherit properties about them, such as hot and cold, that must be balanced within the body. ¹⁶ Most diseases in eyecare fall on the 'hot' side of the spectrum, including diabetes, hypertension, and infection. Patients are reluctant to admit alternative medication use due to perceived skepticism, however even commonplace supplements can be dangerous at medicinal quantities. Garlic extract can lower blood pressure and blood sugar, but may lead to hypoglycemia and hypotension if combined with another hypoglycemic agent. Garlic can also increase the risk of bleeding, as can Aloe Vera. Chamomile tea is traditionally used to treat conjunctivitis, but can in fact cause an allergic conjunctivitis itself. Hence, inquiring about alternative medication use is important to prevent a later catastrophic event.^{1,16,17}

ARABIC AND ISLAMIC

There are more than 3 million Arabic Americans currently in the United States, mostly consisting of third, fourth, and fifth generation immigrants. As of 2015 there were approximately 223,075 Arabic Americans in Michigan, secondlargest in America behind California. Of these, most immigrated from Yemen and Lebanon. Arabic Americans and American Muslims are two very distinct cultural groups; the prior defined by ethnicity, while the latter is defined by religious affiliation. However, the origin of Islam began on Arabic soil, and so there are most certainly similarities and people that belong to both cultural groups. Additionally only approximately 10% to 30% of Arabic Americans are Muslim (35% are Roman Catholic), while in America there are 6 to 8 million African American Muslim followers alone, proving that the two groups are not inclusive.^{19,20} This section will focus primarily on the culture of patients who practice Islam, but these guidelines are neither inclusive only to one culture nor exclusive depending on level of acculturation. As always, having a conversation with the patient on their initial visit can give valuable insight into how they wish for their healthcare to proceed.

Islam is ranks the second largest religion in the world and Arabic Muslim patients are quickly becoming one of the fastest growing minority populations. Muslims believe that their bodies are a gift from God and need to be taken care of. Healthy lifestyle practices are held in high regard including personal hygiene, refraining from eating unclean food product, abstaining from alcohol, and using safety equipment, such as helmets and safety glasses. The exception is tobacco

use, which is deeply engrained and socially accepted within the culture. Several surveys within the Detroit, Michigan area concluded that the majority of smokers (68.2%) consume one half to two packs of cigarettes per day. The ocular side effects of tobacco use include an increased risk of age-related macular degeneration, cataracts, vasoconstriction of the capillaries, uveitis and dry eye disease. Water pipe smoking, or hookah, was found to have similar effects.^{21,22} In 2002, 17.8% of university students reported they began smoking at age 15 or earlier, thus even younger patients should be ask about substance abuse. Diabetes and hypertension are among the most common health conditions within Arabic American populations, as abnormal glucose tolerance affects more than 70% of patients older than 60 years old in Dearborn, Michigan. Due to decreased accessibility to care, 10% of patients from this group go undiagnosed.^{21,23}

Islamic patients feel medicine is made possible through God's influence, thus patients are encouraged to seek help in understanding and treating their diseases.²³ Despite this, many patients may refuse to go to a doctor in America for fear of being rushed or misunderstood. By understanding their culture, this hesitation can be alleviated and result in improved health outcomes. In the Islamic culture, it is frowned upon to have prolonged eye contact or to be alone in the same room as a patient from the opposite sex, especially in the situation of a female patient with a male doctor. The latter may benefit from an additional person in the examination room that is the same gender as the patient, to relieve patient anxiety. Touching between genders is acceptable for medical purposes but should be limited or performed by a same-sex practitioner to avoid discomfort

when possible.^{8,23,24,25,26} When a patient presents for an examination with their spouse or family, they may wish to transfer decisions regarding treatment to them and not be educated on their medical condition. If this is the case, receive permission, and ensure thorough documentation of the discussion.^{19,21}

Islam is also critical when deciding medication use for the patient. Gelatin, alcohol, or porcine containing products are not religiously permitted in Islam, a term called *halal*.^{23,24,26} The zoster vaccine is a porcine based medication, for example, and thus these patients may have an increased incidence of herpes zoster ophthalmicus due to lack of vaccination. Religion is also crucial in the spiritual month of *Ramadan*, as patients fast during which time from sunrise until sunset, affecting the compliance of oral medications. Evedrops and ointments are permissible, as they do not enter the gastrointestinal tract in large enough quantities that would break the fast. Patients are permitted to be exempt from fasting if in conflict with their health, but many patients will attempt to fast regardless. Alteration of medication administration to before dawn or after dusk may be beneficial to increase compliance and efficacy of treatment.²⁴ The Islamic community is very close, with neighbors and close friends anticipating the needs of an individual before they themselves know what they need. This thought process may subconsciously transfer into the examination room, with a patient expecting the doctor to anticipate their needs based upon vague complaints. Asking open ended and rephrasing questions may help narrow down the patient's true reason for presenting for an examination. Likewise, Islamic patients hold practitioners in high regard in terms of respect

and knowledge, and thus may smile, repeat directions several times, and verbally agree on a treatment protocol, even if they are confused or disagree. Patients may also sit closer to the doctor, as Islam is considered 'high context' in nonverbal communication and sitting closer helps to pick up on these nonverbal cues.²⁷ By understanding a patient's nonverbal cues, and asking clarifying questions, miscommunication may be relieved.^{18,27} If an interpreter is required to further facilitate communication, a trained professional should be used, preferably one that is the same gender as the patient. If unavailable, a non-related healthcare worker with a similar background can be used. The use of family members as interpreters should be avoided due to adverse effects on the familial power structure.¹⁹ When a sensitive topic, like sexually transmitted infections, needs to be discussed with the patient it should be done privately with a same gendered practitioner, as it implies infidelity.^{19,24}

Since health is perceived as a gift from God in Islamic culture, God is ultimately the one who relieves illness once a patient atones for their wrongdoings^{. 24,26,52} Muslim patients may turn to forms of worship to be healed, such as prayer, fasting, charitable giving, and reading the Quran. Cautery is a traditional treatment used for ocular complications and headaches but has considerable associated health risks.²⁴ Massage, cupping, and diet-based therapies may also be utilized.^{23,28} Commonly used traditional medications include Fenugreek and Sage, which when taken in medicinal amounts can cause hypoglycemia and clotting disorders, and Nigella may cause hypotension.^{23,28} This can result in

ischemia and potential neuropathy, to not just the ocular tissues but to many organ systems and potentially being life-threatening.

ASIAN

As of 2010, there are 289,607 people of Asian descent living in the state of Michigan, with people from India ranking as the highest subgroup, followed by China, Philippians, Korea, Vietnam, and Japan, respectively.³⁰ Asia is broken up into three main regions: South Asia (India, Bangladesh, Tibet), Southeast Asia (Philippians, Thailand, Vietnam), and the East (Korean, Japan, China, Taiwan).¹ The large geographical spread, multitude of religions, and various ideologies makes it difficult to summarize these subcultures collectively. For the purpose of this section, unifying concepts between the subcultures will be the primary focus, with individual subcultures described as they apply.

Unlike previously discussed cultures, Asian populations have a decreased incidence of diabetes, excluding patients from South Asian descent.³¹ Tuberculosis, however, was 24 times more common in Asian patients than any other group in 2012.¹ Tuberculosis can manifest in the eyes as a myriad of different conditions, including posterior uveitis, granulomas, and keratoconjunctivitis. Inquiring about previous tuberculosis exposure can mean the risk factors for the disease can be discussed and closely monitored, to ensure early intervention. Drugs may also need to be modified due to a decreased ability to metabolize drugs in Asian patients. Chinese patients also have increased sensitivity to beta blockers that needs to be considered when prescribing this medication.³¹ Adjusting ensures an adequate efficacy rate, while

also minimizing the risk of overdose. Social activities also vary greatly based upon subculture. Vietnamese people have the lowest rate of alcohol consumption, while Japanese tend to be moderate to heavy drinkers. Many Asians never smoke, but there is a 20% incidence in the Korean population. Thus, generalities cannot be made and again must be taken on a case-by-case basis.

In a study completed by the Asian American Health Initiative, most Asian Americans did not have confidence in their healthcare provider, due to the provider's lack of cultural understanding.³⁴ Asian patients place a higher emphasis on the family unit than the individual. In Southeast Asia, the term *kinship solidarity* means the individual person is subservient the family unit.³² A patient may be reluctant to present for an examination if it places a burden on the family. Patients will often come to the exam with their family and may defer discussion of their disorder and treatment plan to them to prevent unnecessary anxiety.¹² If this is the case, consent must be obtained and documentation must be completed. The emphasis on family may also discourage patients from expressing negative emotions or pain in the examination room to maintain harmony and prevent distress. Family input may prove beneficial if assessing pain level is instrumental in making a diagnosis because they will likely understand the pain level the patient is expressing based upon nonverbal communication.^{18,33,34} Patients may also disagree with a treatment plan, but refuse to say anything in order to maintain harmony with the doctor. It is best in

these cases to ensure the patient understands and agrees with the proposed treatment protocol, rather than simply agreeing to be polite.

Asian cultures are 'high context' communicators, thus both verbal and nonverbal communication are utilized in discussions. A patient nodding their head may indicate that they hear the doctor, but may not mean they agree. Similarly smiling and giggling can express embarrassment or polite disagreement, especially in younger patients. Conversely, South Asian patients may implement a 'head bobble' when they agree, which appears as though the patient indifferent or disagreeing with the treatment protocol.^{33,35} Nonverbal communication may also work in that the patients believe the doctor has diagnosed their condition, based upon vague complaints and body language they expect the doctor to pick up on.³³ All these potential barriers to effective communication can be eliminated by taking the time to understand the nonverbal communication style of a culture and ensuring patient understanding of the treatment plan.

Asian patients use some other nonverbal cues that it can be beneficial to understand. For example, the use of silence may indicate agreement while with Korean patients it could mean that the patient is in pain. In the Philippian culture, pauses and silence are a natural part of communication and should not be taken offensively.^{18,33} Direct eye contact with a person of higher status is considered to be disrespectful, and could be seen as flirtatious if between the opposite sex.^{1,34} Tone of voice should be softer as loud voices can be considered rude, especially in Vietnamese cultures. In general touch should be limited, but handshaking is

accepted and should be done with the right hand, as some cultures consider the left hand to be unclean.¹⁸

Asian patients can vary in how they perceive time, potentially affecting when they present for their examination. Japanese and Korean patients tend to be highly punctual, while Filipino and Vietnamese patients tend to present a later, a habit which is called 'rubber time' in Vietnamese culture. Recommending a patient comes earlier to fill out paperwork can help provide a buffer for these potential delays. Medication dosing may also be affected due to these perceptions, and so if it is important that a patient take a medication at a particular time the point needs to be stressed.^{1,33} As with other non-English proficient patients, medically trained interpreters should be utilized rather than family members to provide proficient communication. Pamphlets should be available to be given to the patient in their natural language, including images.³⁵

When ill, Asian patients tend to defer more towards allopathic treatments than alternative therapies, however alternative medication can still have a large impact on the patient and affecting how they are managed. Restoring balance is the key driving force in every Asian culture, whether it's the Chinese principle of Yin-Yang, Japanese Kampo, Vietnamese aAma and aDuonga, Filipino Timbang, or Indian Ayurvedic principles.¹ These beliefs can either enhance or impede the patient's overall healthcare experience, depending on how the practitioner inquires about their use.³² Ayurvedic principles were previously discussed in regards to Islamic patients, consisting of the balance between hot and cold. Yin and Yang is based on a similar theory, in that two opposite but complementary

forces must be balanced to maintain health. Timbana, as well as aAma and aDuonga are also very similar to ayurvedic principles. In Kampo, treatment is determined based on a patient's individual symptoms and presentation on a case-by-case basis, with 148 different formulations currently used and under tight regulation in Japan's national healthcare system.³⁶ While excellent results can occur from alternative medications, some treatments should be concerning to practitioners. Astragalus is commonly used for seasonal allergies and diabetes, however it may exacerbate autoimmune conditions. Used at a medicinal level, licorice can raise blood pressure and make congestive heart failure worse, while ginseng can cause potentially fatal blood sugar levels when combined with other hypoglycemic agents. Ephedra is particularly concerning as it increases blood pressure, decreases circulation, elicits angle closure in patients with narrow angles, and worsens thyroid conditions. It was banned in the United States in 2004, but patients traveling abroad may bring it back to the U.S. for personal use.⁵⁵ It is critical to understand if a patient is using these therapies, to ensure proper education and monitoring if necessary. When prescribing allopathic medicine to an Asian patient, it is important to stress the importance of taking the medication only for the particular disease process for a specific time frame. Otherwise, patients may discontinue medications upon disease improvement, or share medications if family members appear to present with similar symptoms. This is especially important for ensuring that a bacterial or viral infection does not reemerge. Sharing must be limited to ensure decreased antibiotic resistance and prevent improper and delayed treatment from occurring.³³ Likewise,

asymptomatic conditions may result in patients misjudging the need for an eye examination. This can occur with a myriad of conditions, including glaucoma, early macular degeneration, and early retinal detachments. Ensuring patients understand the importance of yearly eye exams, even if asymptomatic, is essential.^{4,31,35}

AMISH

As of 2017, there are 313,215 Old Order Amish persons living in the United States, with 15,040 of them residing in Michigan.³⁷ It is the fastest growing rural community in the United States, and with the current growth rate of 5% it is expected to double in approximately 14 years. The Amish resist technology which they feel detracts from their family and community values as well as their relationship with God. Amish patients are generally quite healthy due to high amounts of physical exertion and low tobacco and alcohol use, and as such obesity and diabetes incidences are very low. Cardiovascular diseases are slightly increased compared to the Caucasian population, and hyperlipidemia is of particular concern. There is also a higher incidence of consanguinity as marriage must be within the community, and while not necessarily approved, marriages between first cousins often occurs. This increases the likelihood of genetic ocular diseases within the population, such as retinitis pigmentosa, albinism, and microcornea.^{1,38,39,40}

The Amish population places a high emphasis on family, as has been observed in the previously discussed cultural groups. Generations of family

members may reside in the same house, averaging approximately 12 people under one roof. This emphasis on family can be important with patients who are resistant to treatment, as good health must be maintained in order to work and provide for the family unit. This is especially true in eyecare, as impairment of vision is seen as a disability often more feared than death.^{39,40} Family structure is patriarchal, with the male being dominant and working in the fields, while the female is submissive and maintains the children and home.^{1,40} A doctor should thusly speak to both the husband and wife when deciding upon a treatment plan. A doctor may also need to converse with the church's clerical representative when a patient requires more expensive treatment, such as cataract or glaucoma surgery, as any amount that the patient cannot pay is then paid by the community through alms. If insufficient, the patient's congregation can request alms from other communities to bolster their own funds. Due to other communities paying for the treatment, however, they then have the option to decline if the treatment is seen as too much of a burden on the community. This may come into play with surgeries, but also in treatments such as vision therapy, in which a patient has to travel and pay for multiple sessions in which there is little benefit observed by the community as a whole.^{39,40,51} The Amish patient's primary modes of transportation are horse and buggy and potentially bicycles, and so having the resources to allow a patient to park their buggy while getting an eye exam, such as light poles and wide open areas, can facilitate their needs when these patients come in for an examination. Allowance of extra time may also be beneficial, due to the issues that arise with their mode of transportation.

Treatment options that require multiple visits, such as vision therapy, are difficult as well due to mode of transportation and long commutes. Modifications may be required, such as administrating an extended vision therapy session in one period, performing ancillary testing along with the examination, or reducing follow-up frequency if the patient is stable under current treatment protocol. This can help decrease the burden on the family and make treatment more plausible.¹ Patients may not express discomfort in regards to a condition as they feel it is an insult to God, so careful questions are required to elicit the patient's chief complaint and pain level. ⁴⁰

Transportation is not the only modification required with helping Amish patients feel more comfortable. A practitioner should use direct eye contact, shake the patient's hand, and greet everyone in the room.⁴⁰ The Amish typically do not continue formal education past an eighth grade level, and those that continue further and attend parochial schools do not study science.³⁸ Thus, when describing a diagnosis, it is best to use demonstrations and images to facilitate understanding, and try to avoid slang or jargon. Patients cannot easily communicate with the practitioner once they leave the clinic if they have questions about their treatment, and so ensuring comprehension is critical. This is also helpful in building the doctor-patient relationship, as patients prefer doctors with whom they are on a first name basis who will sit with them one-on-one to listen to and answer their concerns.⁴¹ They do not wish to be seen by a doctor who is 'in training,' such as an extern. They believe if they are going to go

out of their way and pay out of pocket for healthcare they want someone who is experienced.^{1,39}

Amish patients believe their bodies are a gift from God, much like Islamic patients, and so that gift needs to be taken care of. Likewise, medicine and remedies may help symptoms but only God has the power to heal the patient. Contrary to popular belief, patients are cautious, but not against modern medical technology if approved by community leaders. Patients will first use holistic alternative treatments, and if no improvement, they will then seek out medical treatment.^{1,38,39,40} Since family, community, and church are all very interwoven it is not surprising that Amish patients believe in spiritual healing through prayer, reading spiritual literature, positive thoughts, meditation, helping others, and through family activities. They also partake in alternative healthcare practices, such as chiropractic health, folk remedies, and herbal supplements. While many patients are reluctant to take allopathic medication due to cost and side effect, supplementation is very popular, with one study finding as many as 85% of respondents using them, with 60% using some form of home or herbal remedy. This includes the use of vitamins, fish oil, and herbal teas, as well as herbal remedies like Echinacea for colds, and Goldenseal for infections. Since many patients dislike taking allopathic medication, the risk for cross-reactivity is low. Goldenseal, however, is used traditionally for conjunctivitis and may potentially create a secondary allergic response that may present at examination. ⁴¹ Despite its popularity, only 13% of Amish patient discussed their alternative treatments to their doctors, as they believed their doctors would not understand or find the

information relevant. By inquiring without dismissal patients will feel more comfortable presenting for an exam when they need it.⁴¹ When allopathic medications are prescribed, proper medication storage requirements should be considered. For instance, eye drops that require refrigeration will pose some difficulties.³⁹ Amish patients are very compliant when prescribed medications, allopathic or not, as they understand their physical limits and the need to heal to provide for their family, although they will be eager to reduce or eliminate medications as soon as possible.

In the Amish community, insurance is seen as a worldly product and suggests a lack of faith in God to keep themselves and their families healthy. Additionally, it detracts from the community obligation to help one another. Preventative treatment is also frowned upon, as it not only shows decreased trust in God, but also puts a burden on the family and community through expenses without certainty of disease improvement. This may be a factor in discussions for anti-hypertensive medications or anti-VEGF injections and the patient may decline accordingly.^{39,40} Education of the condition and treatment process prior to discussing cost can be beneficial in convincing a patient to undergo a certain treatment process, as can using more affordable treatment options first if available. If a patient agrees to treatment, it is expected to be provided with a cash-paying discount to relieve their financial burden. Otherwise Amish patients will not accept assistance for payment like government support or free clinics, feeling that such an offer is inappropriate.⁴¹

TRANSGENDER

There are an estimated 32,900 adults in the state of Michigan who identify as being transgender.⁴² In order to properly discuss cultural competency in regards to transgender patient's health, terminology must be clarified. A person who identifies as being transgender perceives their gender identity to be contradictor to the physical sex they were assigned at birth. Gender identity is a person's internal sense of themselves, whereas sex is what a person is assigned at birth based upon chromosomes and genitalia. When identity and sex differ, that person then is gender nonconforming, which is the bigger umbrella that transgender populations fall under. Thus, a transgender man identifies as a male, but was assigned a female sex at birth. Nonbinary is also under the nonconforming umbrella, in which a patient may not identify as male nor female. All of these definitions are separate from sexual orientation, which describes sexual attraction only and is based upon the personal preferences of the patient.⁴³

Patients who identify as being transgender come from various ethnicities and background, each having their own health needs and increased health risks. Transgender patients also face many different health disparities within their subculture, including an increased incidence in HIV and AIDS which has ocular manifestations previously discussed in other sections.⁴⁵ One study reported an increased incidence of over four times compared to the general population, with a higher risk in transgender women, especially within minority groups.^{44,45} This can be directly correlated with the disproportionate amount of homelessness

found in this population, with LGBTQ individuals representing 35% of the homeless youth population in America most frequently due to family rejection. To survive, these individuals may engage in 'survival sex' to exchange intercourse for food, shelter, or money.^{1,46} Once diagnosed with HIV, patients often cannot afford treatment due to homelessness or lack of insurance. One study reported 25% of individuals had difficulty receiving insurance in the past year due to being transgender. Even when treatment is affordable, patients decline due to fear of adverse reactions between antiretroviral therapy and hormone therapy or fear of discrimination during an examination. Approximately 38% of transgender patients residing in Michigan reported having at least one negative experience when visiting a healthcare provider in 2015, which ranged from being verbally or physically harassed, to being denied treatment. Consequently, 25% of transgender patients in Michigan did not see a provider when they should have.^{1,47} Many patients also dejected when having to educate their doctor on their specific needs as a transgender patient.^{45,48}

Another concern amongst transgender individuals is an increased incidence of suicide attempts, especially within the youth population. One study reported 41% of the transgender individuals had attempted suicide, compared to 1.6% of the general population.^{7,48} Optometrists are in a privileged position of increased direct interaction duration with patients during which these idealizations may be revealed. By understanding red flags and increased incidence in this population, the patient's safety can be ensured. Alcohol, tobacco and illegal drug use should be questioned due to increased prevalence in this

population, and their effect on ocular structures.^{1,17} Medications, such as hormones taken by these patients can also have ocular effects such as increased exogenous estrogen levels. Depending on the estrogen used, patients may be at a heightened risk of cardiovascular events and thromboembolisms, many of which can become dislodged in the tiny capillaries of the retina and disrupt blood and oxygen flow to the area. While the main estrogen used has a very low incidence of these events, risk increases substantially if combined with tobacco use. Pituitary prolactinomas also rarely arise from increased estrogen use, but unless patient is complaining of visual symptoms, excessive galactorrhea, or headaches, should solely be monitored. Testosterone is more bioidentical and has less side effects than estrogen, however there is certain but incompletely defined research connecting testosterone to worsening autoimmune conditions. Thus, understanding if the patient plans to transition and what medications they are taking can help ensure patient wellbeing.

As is true with any cultural group, preconceived notions of a cultural group can end up disastrous. When addressing patients and unsure, avoid terminology that may assume their gender such as Mr. or sir, or call a patient by their first name only or last name without a suffix to prevent embarrassment. ^{46,48} Intake forms should have the 'two step' method for data collection if possible, including separate questions for gender and sex. If unable, a space should be left open next to gender for the patient to elaborate if they choose. A separate transgender box should not be included, as patients identify as a gender, just potentially not be the one they were assigned at birth. If unable to change the intake forms, it is

acceptable to privately ask the patient how they would like to be addressed in order to not be disrespectful. Once divulged, continue their use for all interactions even if the patient is not around, and put the information in a secured space within the patient's EHR.^{43,49} It can also be included as a 'nickname' so as to respect the patient's confidentiality. this option ideally should be offered to a patient if they web-register as well. If a name change results in discrepancy with insurances or paper records, politely ask the patient if it may be under a different name instead of what the 'real' or 'legal' name would be, as this is seen as offensive.⁴⁶ Staff should be trained in non-offensive language use with all patients, but staff may not see calling someone 'sir' as offensive until they know otherwise. By greeting patients warmly and correctly, it allows transgender patients to feel more welcomed.^{43,49,44}

Other ways to ensure a welcoming environment is availability of unisex or family bathrooms to allow patients freedom from choosing a gendered space where they may not feel welcomed. Waiting areas should include landscapes or abstract art so to not perpetuate stereotypical gender roles, and pamphlets and magazines should cater to all gender designations.^{17,39,49} When administering HIPAA forms, including 'partner's name' instead of 'spouse's name' can also ensure patient satisfaction.⁴⁸ The biggest thing a provider can do is to just be relaxed and treat them as any other patient. If a mistake is made regarding a name or pronoun, apologize for disrespecting the patient. Avoid questions that have no relevancy to treating the patient, and ask questions that do have relevancy in a sensitive manner.^{46,50} By following these guidelines and

understanding the increased health risks and disparities found in transgender patients they will feel gender affirmed, and not only present when an issue arises, but will continue to come again.

CONCLUSION

In this paper, Hispanic, Asian, Arabic/Islamic, Amish, and Transgender populations were discussed. Each cultural group has its own distinct personality, with their own belief system, terminology, and health philosophy. However, there are many common factors among these populations. The biggest sub-theme is the role of family, and how it can provide either a strong support system or create barriers to patient care. By including the family in the discussion and education, the practitioner can gain both the patient and family's trust. The family may still ultimately decline treatment, during which respect their wishes and document the encounter. It is also helpful to remember to never use a family member as an interpreter if possible, as misinterpretation and exclusion may occur that could lead to miscommunication and mistrust. Another sub-theme is the use of alternative therapies. Inquisition, inclusion and incorporation of these therapies into treatment protocol can lead to better compliance, better communication, and a better doctor-patient relationship. While every cultural group is distinct in their cultural healthcare needs, it should be understood that every patient is a collection of their life experiences, and thus these guidelines should be when doctors assume that these guidelines apply to all patients from a particular ethnicity patients can feel overlooked, mistrustful and uncomfortable While these guidelines were for eyecare provider. When doctors from all specialties

understand and utilize cultural competency and sensitivity correctly, patient health outcomes and satisfaction greatly increase.

In the future it would be ideal for guidelines to be written, not only about other larger cultural groups, but also more details about the subgroups within them. Does a patient from Peru want different care than a patient from Brazil? Do people from Iraq view their health differently than people from Pakistan, versus people from Lebanon? Preferably, detailswould have been included within this paper but there are not sufficient resources available in the literature at this time. It would also be desirable to collect data through surveys and interviews with persons of the cultural groups mentioned, in order to compare answers found through literature to those found in real practice. Through the use of these guidelines it is hoped that an eyecare practitioner, regardless of cultural background, may assist their patient not just with their eyecare needs, but with also feeling accepted within the larger health care community.

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