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Speice 3A

Independent Study and Mentorship

28 August, 2018

Getting the Basics Down

Assessment 1- Career Outlook

Date: August 28, 2018

Subject: General Optometry and its Future

Works Cited:

Bekker, Mary, and David E. Newton, EdD. "Optometry." *The Gale Encyclopedia of Nursing and Allied Health*, edited by Jacqueline L. Longe, 4th ed., vol. 5, Gale, 2018, pp. 2576-2579. *Health & Wellness Resource Center*, http://link.galegroup.com/apps/doc/CX3662600820/HWRC?u=j043905010&sid=HWRC&xid=ec2551ac. Accessed 29 Aug. 2018.

Assessment:

Throughout the first week of ISM, research has been essential to building the foundation for the course and for what each career entails. This week, I was able to find an article that detailed in what optometry is, specific branches of the field, and where optometry is heading in the future. By collecting the baseline information of optometry, my future research will continue, followed by more “in depth” thinking, possibly in more specific branches of optometry, and maybe the correlation between diabetes and eye vision.

After reading the article *Optometry*, I was able to get a more precise understanding of what the field offers and how to get there. Initially, the text introduced the topic by elaborating on the different subdivisions of optometry; Low Vision/ Vision Rehabilitation, Vision Therapy, Pediatric Optometry, Geriatric Optometry, Research and Consulting. From this, I was able to learn about the different sectors of optometry and how they are applied to different groups of people. Personally, I am intrigued with Geriatric Optometry because this branch identifies any possible signs of ocular diseases. This is more prevalent in elderly individuals, due to their aging vision over time. Additionally, this portion of optometry is especially appealing to me because this section also explains how diabetics usually have trouble with their eyesight. Considering my mother has Type I Diabetes, this topic is genuinely interesting to me, and I would like to explore more on the subject, in my future studies.

Along with the generic description of optometry, this text also provides the basic "work setting" an optometrist can expect to experience when entering the field. With that I learned that many optometrists "...choose primary care or family practice because it gives them the biggest diversity of patients". This relates to my personality, in that moving around and seeing new faces daily is a requirement, in order for me to function and have an enjoyable time in whatever occupation I choose. This article describes the flexibility built into being an optometrist, which led me to easily picture myself in this profession.

This article also notes the required education and training to become an optometrist. In addition to an undergraduate degree from a four-year university, aspiring optometry students should take and do well in courses such as physics, chemistry, biology, and

physiology. Secondly, students should try to score well in the top percentages of the Optometric Admissions Test (OAT). From there, students can apply to an optometry school, then receive their Doctorate in Optometry (OD) after another four years of schooling, and must complete residency for about one to two more years. Although this process is tedious and demanding, students can start at an optometrist office immediately after finishing their education and training. This information was telling because I learned that optometry school is not considered as going through medical school, and does not require taking the MCAT. Optometry to me is fitting because it will require minimal to no blood whatsoever, as compared to many medical careers. I am certain that I was to pursue a career involving interacting with different people, but not necessarily becoming a specialized doctor engaged in surgeries or blood.

In addition to this text, the article provided key terminology, both undefined and defined. While reading and annotating through this document, I made sure to look up any vocabulary that I was unfamiliar with. In regards to that, I would sometimes find myself in different articles, researching and indulging in the new content. Reflecting back on the research I invested into this week, I am confident that am passionate towards my topic, considering I desire to learn more daily, stemmed from my original single article. While I was doing extended research, I came across the primary difference between an optometrist and an ophthalmologist. An optometrist detects diseases in the eye and prescribing corrective lenses to patients. However, an ophthalmologist is geared more towards the surgical aspect, in order to correct vision for individuals.

After analyzing and annotating my chosen article, I am able to apply this information to where I see myself in the future. My basic research allowed me to understand the generic information behind basic optometry. By reading more on the branches of optometry, I am able to realize what divisions of optometry I could see myself in, as a career. More importantly, I have gained that optometry is a developing field for women. This specifically applies to me, because years from now, this field could be a promising career for me.

While concluding my research for this week, I have planned my next steps forward through this process. Next, I plan to look into different diseases in the eye, various corrective lenses and their prescription meanings, and potentially vision in connection with diabetes. This first week was difficult in that I was not certain where I wanted to start in regards to my research. Now that I have the baseline knowledge for my topic, I intend to take my interests further. This week was the first step to making ISM a reality and an experience to get the most out of. I can only take this course one step at a time and trust my research and interests, as I continue to work through my progress.

Optometry

The Gale Encyclopedia of Nursing and Allied Health. 4th ed. 2018.

Full Text:
Page 2576

Optometry

Definition

change in direction

Optometry is the profession of examining the eye for defects, diseases, or faults of refraction, and prescribing pharmaceuticals, corrective lenses, or exercises to treat these conditions. Doctors of optometry (ODs) are trained and licensed to detect and treat ocular symptoms and diseases.

general definition of optometry

Description

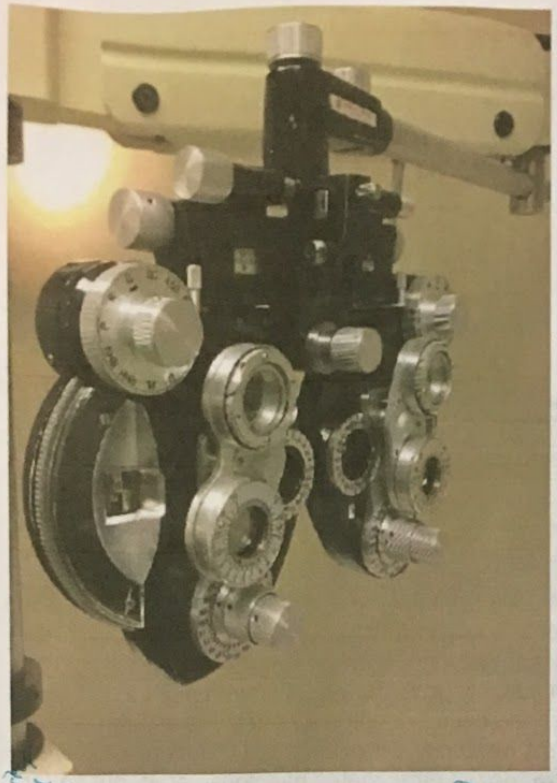
requirements

Doctors of optometry are primary healthcare professionals who examine, diagnose, treat, and manage diseases and disorders of the visual system, the eye, and associated structures, as well as diagnose related systemic conditions. They prescribe glasses, contact lenses, low vision rehabilitation, vision therapy, and medications, as well as perform certain surgical procedures. ODs need eight to ten years of preparation for their profession—four years to earn the doctor of optometry degree, and one to two years of residency in training. As of 2017, three states, Kentucky, Louisiana, and Oklahoma, allowed ODs to perform laser refractive surgery. More than two dozen other states had considered, but so far not yet passed, similar measures.

actions

vision correction surgery

LASIK
PRK
LASEK
RLE + PRELEX
Intacs
Phakic intraocular lens implants
AK/LRI



The profession of optometry also routinely includes diagnosing and treating the ocular complications of diseases such as diabetes and hypertension, rehabilitating patients with brain injury or stroke, and providing low vision services for the partially sighted. This includes vision therapy for patients with amblyopia and strabismus (crossed eyes). ODs also take an active co-management role with ophthalmologists (M.D.s) in the pre- and postoperative treatment of patients after laser refractive surgery and cataract surgery.

Primary care

All ODs treat diseases and dispense corrective lenses for astigmatism, hyperopia, and presbyopia. They monitor the patient's depth perception and ability to focus and see Page 2577 | Top of Articlecolor. Many optometrists choose primary care or family practice because it gives them the biggest diversity of patients.

Some of these primary care ODs specialize in contact lens fittings. Recent advances have allowed patients previously restricted from wearing contact lenses to wear a number of types of lenses. Astigmatic and presbyopic patients require more specialized contact lens fitting, which these specialists can provide. Sometimes other ODs or ophthalmologists will refer their patients to these contact lens specialists. These ODs also are more familiar with infections and irritants caused by contact lenses and how best to treat them.

Some ODs specialize in certain other areas of optometry, as well as in contact lenses. These specialties include:

1. ***Low vision/vision rehabilitation***

Some ODs focus mainly on low vision services and work in tandem with ophthalmologists, rehabilitation specialists, and government and private agencies. They sometimes work together to determine the best optical devices that improve the quality of life for patients with limited vision. These patients are referred to these optometric specialists usually after a colleague has performed an initial evaluation. The OD and members of the specialized team take the routine exam one step further by utilizing magnifiers, specialized charts, telescopes, colored filters, lenses, prisms, computerized devices, lights, and closed-circuit televisions designed to maximize vision. The low vision specialist is up-to-date on the latest vision aids and treatments so that his patients can lead more productive lives.

Elderly

(2) ***Vision therapy (developmental vision)***

Vision therapy is a specialty in which ODs concentrate on the ways in which eyesight affects human behavior. Vision therapy specialists work with physicians, psychologists, educators, and parents to treat learning disorders, such as dyslexia, by helping patients with handeye and other motor coordination. These specialists also treat patients suffering from amblyopia and strabismus. Some of these patients are adults; many are school-age children.

How vision affects human behavior/how people see words or read

(3) ***Pediatric optometry***

This is a popular optometric specialty. Common vision problems in children include myopia, amblyopia, and strabismus. These specialists work with parents, children, and school systems, counseling them on proper treatment as well as nutrition.

School/children

(4) ***Geriatric optometry***

How does diabetes change eye sight/vision?

As patients age, the frequency of ocular disease increases. Specialists can detect and treat macular degeneration, glaucoma, and diabetic eye conditions. They also can detect cataracts and co-manage these patients post-operatively with an ophthalmologist.

With the geriatric population expected to increase dramatically due to aging baby boomers, more optometrists will find an expanding need to serve this population, and possibly increase the number of ODs who might decide to choose this specialty.

Some ODs focus on these patients in an existing practice, while others serve patients in nursing homes or clinics with large numbers of elderly patients.

Elderly/Growing + Demanding branch/detecting diseases in eyes early

(5) ***Research and consulting***

Some vision companies, especially contact lens manufacturers, seek out optometrists to help them with new product development or to refine existing products. Other optometrists conduct research in a clinical or educational setting.

Involved in developing new technology/products

Work settings

ODs may have private, group, or partnership practices in hospitals and eye clinics. There are also commissioned posts for optometrists in the military. Government agencies seek advice from ODs for health advisory committees, and corporations rely on optometrists for consultation on new products.

- own practice
- w/ others
- stores
- military

Optometrists practice mainly in solo private practices or in a group private practice with other ODs. Their offices are located in office buildings, medical parks, storefronts and shopping malls. Some ODs opt for working for or franchising chain "superstores" that offer a big selection of frames and quick-turnaround services for patients.

Sudden change in field → be well aware of

With the rise of laser refractive surgery, ODs are increasingly becoming a part of ophthalmologists' group practices. In these instances, the OD is usually not a coowner of the practice, but an employee

instead. Some refractive laser centers keep ODs on staff strictly for comanaging the large volume of refractive surgery patients.

Education and training

requirements

ODs must complete high school and a bachelor's degree before admission to a four-year optometry school. The pre-optometry student's courses should include physics, organic chemistry, biology or zoology, physiology, statistics, geometry, and calculus. These students also need to score in the top percentages of the Optometric Admissions Test before being accepted to an optometry program. Admission to these accredited programs is Page 2578 | Top of Articlelimited, so it is important for students to maintain a high undergraduate grade point average and achieve a high score on the admissions test to earn a slot at these schools. - HS - undergrad - required classes - OAT - high GPA - Op. School

KEY TERMS

Amblyopia—
Decreased visual acuity, usually in one eye, in the absence of any structural abnormality in the eye.

Astigmatism—
Asymmetric vision defects due to irregularities in the cornea.

Cataract—
A cataract is a cloudiness or opacity in the normally transparent crystalline lens of the eye. This cloudiness can cause a decrease in vision and may lead to eventual blindness.

Glaucoma—
Disease of the eye characterized by increased pressure of the fluid inside the eye. Untreated, glaucoma can lead to blindness.

Presbyopia—
A condition affecting people over the age of 40 where the system of accommodation that allows focusing of near objects fails to work because of age-related hardening of the lens of the eye.

Refraction—
Method of determining the optical status of the eyes. Lenses are placed before the patient's eyes while reading from an eye chart. The result is the eyeglass or contact lens prescription.

The four-year programs focus mainly on clinical and practical teachings. In recent years a few programs have added practice management courses to help optometrists cope with managed care paperwork and increased competition from retail chains. First-year students study human anatomy and physiology and the basic principles of optics. Optometric sciences, ocular physiology and pathology, vision anomalies, and instruments of clinical practice are studied in the second year. Third-year students take those same topics to a higher level and begin studying contact lens fitting and general clinical practice. The student's last year of study includes treating patients under the guidance of teaching optometrists, usually at optometry-school run clinics. Student ODs during the fourth year prescribe and fit contact lenses, and diagnose and treat visual system conditions. * Don't prescribe/diagnose until 4th year

During the four years, optometry students also are offered a number of electives that include epidemiology, environmental vision, microbiology, and biostatistics. elective courses

Optometry schools usually operate clinics where patients need them most—in inner-city neighborhoods, nursing homes, or correctional facilities. This enables care for patients in need while offering fourth-year students an opportunity to detect and treat a number of ocular conditions. inner-city = most needed area

additional step

After optometry students complete a four year program but before they can begin practice, they must complete a series of written examinations—at least three written and one practical—for a license in

order to practice. These licenses are granted by state boards of optometry. Each state has different requirements. While these requirements are similar from state to state, graduating optometry students must check with each licensing board for specific requirements.

Additional process if one wants to specialize

Advanced education and training

Recent optometry school graduates sometimes complete master's or doctorate degrees in related medical specialties such as physiological optics, visual sciences, or public health. Some of these doctors enter research or education.

Optometrists who want to specialize in certain areas complete a one-year residency after graduation at educational institutions or hospitals. These internships could include pediatric or geriatric optometry, low-vision rehabilitation, or vision therapy.

State boards of optometry require a certain number of continuing education credits for practicing optometrists. This training is completed through specialized courses at meetings, optometry schools, optometric journals, and the internet. Continuing education credits must meet specific requirements of each state. The OD must check with the state licensing board for specific details.

Future outlook

Women moving up into optometry!

More women are becoming optometrists than in years previous. About 25% of practicing optometrists are women. That number should rise since 50% of optometry students are women.!

In its 2015 edition of the popular Occuptional Outlook Handbook, the U.S. Bureau of Labor Statistics predicted that job opportunities for optometrists would increase by 27% between 2014 and 2024, a rise much higher than that for occupations in general in the United States. Several factors could affect that prediction.

Prediction seems promising for future fellow optometrists!

1. Geriatric population. The increasing number of elderly patients could mean a highly increased number of office visits for optometrists. These elderly patients need more frequent examinations for myriad eye diseases and conditions.
2. Vision plans. Managed care has brought more patients into optometrists' offices in recent years. Before Page 2579 | Top of Articlemanaged care, many patients delayed regular eye exams because of cost. Because comprehensive vision plans routinely pay for regular eye exams, and in some cases contact lenses and eyeglasses, more patients routinely are being seen by ODs at a higher rate of frequency.
3. Retail chains. More eye care patients are utilizing the convenience of these large "superstores" to fulfill their vision needs. These chains sometimes have several optometrists on staff. The need for "corporate optometrists" is expected to grow in the coming years. These positions do not pay as competitively as private practice; but they also do not incur the large debt that opening or purchasing a practice does.

Full Text:

See also **Eye examination ; Ophthalmology .**

Resources

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"Optometry: A Career Guide." *Assocation of Schools and Colleges of Optometry*. http://www.opted.org/wp-content/uploads/2013/03/EyesHaveIt_CareerGuide.pdf . (accessed March 14, 2017).

ORGANIZATIONS

American Academy of Optometry. 909 Fairgreen Street, Orlando, FL 32803. (321) 319-4860. (844) 323-EYES (3937). aaoptom@aaoptom.org. http://www.aaopt.org/ .

American Optometric Association. 243 N. Lindbergh Blvd., Floor 1, St. Louis, MO 63141-7881. (800) 365-2219. http://www.aoa.org/ .

National Board of Examiners in Optometry. 200 S. College Street, #2010, Charlotte, NC 28202. (800) 969-EXAM. (704) 332-9565. nbeo@optometry.org. http://www.optometry.org .

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