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ARTICLES

Preparedness of Optometry Students for Discussing Visually Devastating Eye Disease
Elyse L. Chaglasian, O.D., F.A.A.O.
Jason Hafner, O.D.
Ryan Ellwein, O.D.
Daniel K. Roberts, O.D., M.S., F.A.A.O.
The authors study the self-perceived preparedness and comfort level of third year optometry students in discussing potentially visually devastating eye diseases with patients.

Teaching Optometry Students Empathy for Patients with Low Vision
Dawn K. DeCarlo, O.D., M.S., F.A.A.O.
Diana Shechtman, O.D., F.A.A.O.
A study demonstrates that empathy for patients can be taught by simulated low vision experience, enhancing the educational experience of optometry students in a vision rehabilitation course.

Teaching the Balancing Act: Integrating Patient and Professional Agendas in Optometry
Marlee M. Spafford, O.D., Ph.D., F.A.A.O.
Lorelei Lingard, Ph.D.
Catherine F. Schryer, Ph.D.
Patricia K. Hrynych, O.D., F.A.A.O.
Novice case presentations were observed in order to identify the opportunities optometry students have to learn about balancing patient and professional agendas.

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Optometric Education Think Tank
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Association of Schools and Colleges of Optometry

The Association of Schools and Colleges of Optometry (ASCO) represents the professional programs of optometric education in the United States. ASCO is a non-profit, tax-exempt professional educational association with national headquarters in Rockville, MD.

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An Invitation to Contribute

Elizabeth Hoppe, O.D., M.P.H., Dr. P.H., F.A.A.O.

I am honored by this opportunity to serve as editor of Optometric Education. As I begin this term of appointment, I salute the former editors of Optometric Education - as listed on page seven of this issue - whose efforts have made possible the quality peer review journal that we have today.

Optometric education is a unique profession unto itself. We serve as a bridge from research to lectures, from evidence to patient care, from needs to policy. By its very nature, working in the field of optometric education requires a focus on the future. Our actions today serve to shape the dynamic of the profession 10 and 15 years hence when today’s students become tomorrow’s leaders. While we may not be able to recall last year’s Academy Award winners, Grammy nominees, or All-Star athletes, each one of us could name an influential professor from our own education with little hesitation. Recognizing that impact, and using the forum of our professional literature, can only serve to strengthen the art and science of optometric education.

It is important for a profession to have its own literature base. Our journal, Optometric Education, is a peer-reviewed publication and is electronically indexed in Current Index to Journals in Education (ERIC) and VisioNet. With a readership comprised of today’s optometric educators, the journal has the potential for tremendous impact and influence in the current thinking across the 17 affiliated institutions. A strong and vibrant literature supports the growth of the profession and the evolution of our educational processes.

I invite you to collaborate with me to make our journal representative of our professional interests and to serve our needs as educators. We need your submission of scholarly manuscripts and your involvement with two new features. One is a forum to share ideas and opinions on key issues in our profession, entitled “20/20 Think Tank.” In this format contributors share their own perspectives on a key topic for the past 20 years and look ahead to the next 20 years. In this issue we present the view points of seven of our creative thinkers. We asked, “What do you think are the most important developments of the last 20 years in optometric education, and what will be the most important issues for optometric education in the next 20 years?” The answers represent a thought-provoking dialogue that I hope will spark discussion and debate among educators and administrators.

The second new feature, “My Best Day in Optometric Education,” shares personal narratives from individuals engaged in facets of optometric professional education on a daily basis. In this issue we highlight one of those “aha!” moments experienced by a seasoned optometric educator when he finds a new way to capture the minds of the students. This new series may inspire you to share one of your own success stories.

Please accept my invitation and seize this tremendous opportunity by becoming a contributor to our profession, the profession of optometric education.
The following companies support ASCO’s national programs and activities benefitting all 17 schools and colleges of optometry in the U.S. and Puerto Rico:

**Visionaries ($100,000+)**
- Ciba Vision Corporation/Novartis Ophthalmics

**Benefactors – $30,000 - $49,999**
- Vistakon, Division of Johnson and Johnson Vision Care, Inc.

**Supporters – $15,000 - $29,999**
- Alcon Laboratories
- Wal-Mart Stores, Inc.
- Essilor of America
- Carl Zeiss Vision

**Transitions Optical**
- New methodologies continually arise to move forward our conception of quality vision care. Transitions Optical has observed that many eyecare professionals are truly “Healthy Sight Counselors,” exemplifying a new philosophy of integrated care for healthy sight that reaches beyond prescribing or dispensing eyeglasses to address preventive vision and eyecare concerns as well as patient education.

**Hoya Vision Care**
- Hoya Vision Care announced that Gerry Bottero, who has been in charge of Hoya Vision Care North America since June 2004 has been promoted to president of Hoya Vision Care’s international operations. As the new head of Hoya’s global vision care operations, Bottero will move from the U.S. to Amsterdam where Hoya’s European office is located. U.S. optical industry veteran Barney Dougher will head up Hoya’s U.S. operations as president and COO. Hoya Corporation announced earlier this month that it intends to spend $1.1 billion dollars on acquisitions this year of which half is allocated for the vision care division. In addition, Hoya was recently named as one of the Top 100 technology companies by Business Week.

**Alcon Laboratories**
- Alcon Laboratories announced its 2006 Scholarship Awards Program. All 4th year optometry students are eligible for the award. The student must write a case report that incorporates the use of any Alcon product, such as Patanol®, Vigamox®, TobraDex®, etc. There is no maximum or minimum word limit to the case reports and all case reports must be submitted to the designated Scholarship Awards Committee person by January 31, 2006. The student with the winning case report from each school will receive $1,000. The overall national student scholarship winner, selected by a panel of independent doctors, will receive an additional $5,000.

**Essilor of America**
- Students from all nineteen optometry schools in North America, Canada and Puerto Rico participated in the Varilux® Optometry Super Bowl sponsored by Essilor of America. This year’s event was held at the American Optometric Association Congress and American Optometric Student Association meeting in Dallas, Texas. For the third consecutive year, the Southern College of Optometry took home the esteemed crystal Super Bowl trophy and $1,000 prize money. Second place went to UC Berkeley and third place went to Inter-American University. “Our event gives Optometry students the chance to increase their understanding of the field as well as network with their peers. They are the future leaders of the profession.”

**Wal-Mart Stores**
- Wal-Mart Vision Centers reminds all 17 U.S. and Puerto Rico schools to take advantage of the 2005-2006 Wal-Mart Scholarship Program. Students in their 2nd, 3rd and 4th years are eligible for the award. In February 2005 a letter was sent to each dean regarding the program, along with the necessary paperwork for the $1,000 scholarships. For further information, please contact Tammy J. Halstead at Wal-Mart (Tammy.Coplin@wal-mart.com) (1-800-221-1655, ext. 53376).
of Optometry,” said Dr. Rod Tahran, vice president of professional relations and clinical affairs for Essilor.

Bausch & Lomb

Bausch & Lomb announced the recipients of the 2005 Bausch & Lomb Vision Recognition Award, a program that honors eye care professionals who attain the highest ideals in vision care and personify Bausch & Lomb’s commitment to Perfecting Vision, Enhancing Life. “The 2005 Visionaries are outstanding professionals who have made significant contributions to eye care,” said Paul G. Howes, Bausch & Lomb’s president and president of the Americas region. “We are proud to recognize and celebrate the accomplishments of these deserving individuals.”

Among the four Visionaries chosen by an independent Visionaries Selection Committee comprised of representatives of academia and professional organizations was Richard M. Hill, O.D., Ph.D., Ohio State University College of Optometry (OSU). Dr. Hill is dean emeritus and professor of optometry and vision science at OSU. Each Visionary receives a grant that can be donated to vision-related, nonprofit organizations chosen by the honoree.

Volk Optical

Volk Optical, the leader in aspheric optics, announced that Steve Cech has been promoted to the position of vice president of research and development. In his new position, Cech will continue to oversee all phases of product development and engineering for the company’s line of diagnostic, therapeutic and surgical ophthalmic lenses, equipment and accessories. Cech will now also serve on the company’s Board of Directors, helping to shape the company’s strategic plan and guiding its continued growth.

To order Volk products or to find a local distributor, visit www.volk.com or phone Volk at 1-800-345-8655.

Safilo Group

Safilo Group introduced four new limited edition ophthalmic styles in its Ralph Lauren Polo men’s collection. “We are very excited to offer these new additions to the Ralph Lauren Polo collection. They offer impeccable styling using the highest quality materials that embody the American fashion and quality for which Ralph Lauren is known, said Dick Russo, senior vice president of sales for Safilo USA.

Safilo Group, headquartered in Padova, Italy, is one of the world’s leaders in the design, production and distribution of high quality eyeglass frames, fashion sunglasses and sports eyewear. Safilo offers a number of collections produced under license. In addition, Safilo has a number of its own proprietary brands including Carrera, Smith and Safilo Elasta. Safilo USA, the U.S. subsidiary of Safilo Group, is located in Parsippany, NJ.

The annual Varilux® Student Grant Award was presented to Stacy Hufnage, a third year student at Indiana University College of Optometry, who wrote the winning case study, “Application of Varilux® Ellipse® in a Young Unilateral Pseudophake.” “It is rewarding to know that students are learning about the applications and advancements that Varilux lenses offer patients,” said Dr. Tahran. “Essilor has always been dedicated to empowering students studying Optometry. We know that supporting the educational process helps to prepare students to become the industry leaders of tomorrow.”

Dr. Elizabeth Hoppe, associate dean for academic affairs at The New England College of Optometry, was chosen by ASCO’s Board as the new editor of the journal for a three-year term commencing July 1, 2005. Dr. Hoppe joins an illustrious group of faculty who have generously shared their time and talents to speak out on issues of concern to optometric educators and to encourage quality research and writing. Their efforts have made it possible for ASCO to continue publishing a peer-review journal that is so well respected in the profession.

Past Journal Editors

2002 – 2005  Dr. Lester Janoff (NOVA)
1999 – 2002  Dr. Roger Wilson (NEWENCO)
1991 – 1999  Dr. Felix Barker (PCO)
1987 – 1991  Dr. David Heath (NEWENCO)
1985 – 1987  Dr. John Potter (SCCO)
1979 – 1985  Dr. John Amos* (UAB)

*Chair of a five-person editorial council
Larry J. Davis, O.D., F.A.A.O., began a one-year term as ASCO’s president in June 2005. Dr. Davis is dean and associate professor of optometry at the University of Missouri-St. Louis College of Optometry.

Dr. Davis received a Bachelor of Visual Science degree from Indiana University School of Optometry in 1985 and his Doctor of Optometry degree from Indiana University School of Optometry in 1987.

After completing a residency in cornea and contact lenses at the University of Missouri-St. Louis School of Optometry, Dr. Davis was hired as an instructor of ophthalmology at St. Louis University School of Medicine, working his way up to assistant professor. In 1993 he came to the University of Missouri-St. Louis School of Optometry as assistant professor, served as interim dean of the school for two years and began as the dean in 2002.

Dr. Davis holds a Diplomate in the Cornea and Contact Lenses section of the American Academy of Optometry (AAO) and recently completed a seven-year term as a member of its Scientific Program Committee. He has had numerous articles published in optometric journals. In 2002-03 he was one of three deans chosen by ASCO to participate in the Federation of Associations of Schools of the Health Professions (FASHP) Leadership Program for Administrators of Health Professions Training Programs.

What are some of the current issues in optometric faculty development, and why is ASCO so committed to this area?

As the faculties succeed, so do our institutions, individually and collectively. The work of faculty is the most influential singular force that shapes the nature and direction of optometric education. In his book entitled Academic Duty, Donald Kennedy, professor and president emeritus at Stanford University, states, “The very heart of the institution...is the work of its faculty.” The diverse demands of that work are increasingly more complex and often foreign to new but enthusiastic junior faculty.

In a 2003 study of current and former faculty at 16 ASCO member institutions, Dr. Sally Dillehay found a five-year attrition rate of nearly 26%. Therefore, even with no growth in the number of positions, it will be necessary to fill at least 50% of the existing faculty positions within ten years. Since 50% of the separations represent faculty who have served in their respective positions for five years or less, one important strategy to lessen the demand for new faculty is to increase the retention of current faculty. The Dillehay study suggests that the attrition of junior faculty could be reduced by providing opportunities for them to learn, grow and assimilate into the academic culture early in their career.

Professional development also offers faculty the opportunity to equip themselves for the diverse and often competing demands of teaching, patient care, research and service. Like faculty in other disciplines, optometric faculties usually learn “on the job,” and few have sufficient knowledge of the theories and practice of teaching and learning. When they are hired, many are naive to the expectations and habits of engaged and successful members of the Academe. We train staff and orient...
our students as they enter our institutions, but often fall short of adequately preparing our faculty for their critical role in our programs. We have bright individuals among our faculties and most figure it out, but we should and can do better. In addition to promoting career satisfaction and faculty retention, opportunities for faculty development can increase the overall effectiveness of our institutions.

ASCO is also in a great position to increase, among current and potential students, the awareness for optometric education as a fulfilling career path. Our junior faculty are the future of optometric education, and in that role they serve as a major influence for the future of optometry.

It is appropriate to acknowledge the excellent work of the ASCO Chief Academic Officers, particularly Janice Scharre, David Heath, Linda Casser and Chuck Haine for stepping up to the challenge to plan and organize the first ASCO Institute for Faculty Development. Next summer faculty who are one to five years into their academic career will be invited from each of our institutions to participate in a four-day workshop that will help them to assimilate the skills, knowledge and abilities necessary to be highly effective career educators. Recognizing the importance of this initiative, ASCO committed $25,000 in matching funds. Several corporate partners who value the potential impact of this new opportunity have also pledged to support the endeavor. Invitations to participate will go out this fall.

What other key issues will you emphasize during your term as ASCO President?

Equally as critical to our profession is the recruitment of highly qualified applicants including under-represented minorities. The work and initiatives implemented for student recruitment over the past five years must continue and where possible be expanded. Although applications to the schools and colleges of optometry have increased from the low in 2002, they continue to be short of the goal of at least three qualified applicants per available position.

Also, we must continue to recognize that the influence of our activities is enhanced by working cooperatively with our colleagues in other organizations. I am excited about the opportunities offered by AOA’s Optometry 2020 Summit. Our institutions, individually and collectively, will continue to serve as critical contributors for shaping our profession. It is important however, that we remain open to unidentified opportunities for change in order to remain effective and connected as optometry seeks to define itself for the 21st Century. A commitment to personal and collective growth - seeking the best today and better for tomorrow - will prepare and sustain us for the years ahead. There is tremendous personal satisfaction associated with improving the visual welfare of others through teaching, research and patient care. As a result, optometrists — whether in education, clinical practice or industry — are not alone in wanting to impact the future of eye and vision care. Where we fall short in meeting the needs of our patients, we risk having others move in to close the gap. We therefore must be diligent to maintain our relevance to the eye and vision care enterprise in pursuit of excellence.

Who were the people who influenced the development of your educational, administrative and leadership ideas?

First, I am reminded of my father who graduated from college when I was around 10 years old. Over the years, I have come to recognize and appreciate that it was a tremendous achievement. He not only completed an engineering degree in four years, but he continued to work full time in order to provide income for our family. Reflection on the ways in which mom and dad managed those four years reminds me that commitment, dedication, sacrifice and hard work can be very rewarding and open doors to life’s rich opportunities. Many of our students find themselves in similar circumstances, and I have a deep respect for those who persevere through such challenges.

There are several individuals whose confidence in my skills and abilities served to increase my interest in optometric education. First, Herbert Riley and Clifford Brooks allowed me to serve as student teaching assistant in their respective courses, and Carolyn Begley afforded me the opportunity to work in her research laboratory as a fourth year student. Then there is Ed Bennett a great encourager and mentor for my residency experience in cornea and contact lenses. Each of those experiences helped to confirm my interest in teaching, research and education.

As an early career administrator, I have on occasion taken the opportunity to be a student of the philosophies and models for leadership. The works of John C. Maxwell including the 21 Irrefutable Laws of Leadership have equipped me with many practical insights along the way. Also, the model of transformational leadership as applied by Bruce Avolio in his book entitled Full Leadership Development has helped to frame my understanding and approach for engendering effective and lasting change within the college.

Beyond that, I have also had the privilege of developing friendships and working relationships with other talented leaders and accomplished colleagues in optometry. My life and career have been enriched by those interactions. Over the years, I have valued the opportunity to work with and learn from creative critical thinkers including Joe Barr, Karla Zadnik, Timothy McMahon, Loretta B. Szczotka-Flynn, Timothy Edelrington and Tom Raasch; dedicated teachers including Linda Casser, Kent Daum and Doug Penisten; those who give themselves through exemplary service to education including Morris Berman, Chuck Haine, David Heath and Janice Scharre. I have also had the opportunity to work with numerous gifted practitioners, observing and learning from their devotion and service to professional optometry. The relationships and collaborations with UM-St. Louis faculty, students and staff have often proved to be instructive, spawning many opportunities for personal and professional growth.

Often brief personal and professional interactions can have a profound influence on us. Perhaps the most significant professional influence was from the late Jack Bennett who extended the invitation for me to serve in administration, convincing me that although untested, I had what it takes to lead the college. Prior to his invitation, administration was not even a distant aspiration. Over the past five years I have received encouragement, inspiration and insight from each member of the ASCO Board past and present. John Schoessler, a humble and devoted leader, has been especially influential in my development as an administrator. Last, but certainly not least, I value the opportunity to have known another great encourager and ambassador for optometry, the late W. (Continued on page 30)
The influence of technology has to be one of the most important developments in optometric education over the last twenty years, the full impact of which is not yet realized. Word processing on the desktop of every member of the faculty and staff has changed relationships between and among each stakeholder within the academic, clinical, teaching and learning and research areas. Information exchange — the essence of what we do as educators — occurs more quickly, in more places, for more people and as a result has facilitated the emergence of more sophisticated approaches to teaching and learning, research and patient care. Interactive classroom technology allows students to complete a self-assessment of their fund of knowledge and critical thinking skills in real time independent of the instructor. Imaging technology allows clinicians to instantly share information about patient encounters world wide.

Technology will also help to transform the curricular design for entry level practice and continuing education over the next twenty years. The emergence of faculty committed to evidence based teaching and learning, thereby maximizing learning within a program having limited time, will be critical. Equally as important will be maintaining the recent success for research funding within the increasingly diverse and complex areas of optometry.

Larry J. Davis, O.D.
Dean
University of Missouri
at St. Louis College of Optometry

The most important development was the significant increase in clinical experience required prior to graduation and the attendant shift from an entirely in-house clinical exposure to the nearly universal use of external rotations for a significant percentage of patient care by interns. This permitted even schools with small local populations to conduct rich and diverse clinical programs at a cost that kept education affordable. With the elimination of direct federal funding for optometric education in the 1980's, these programs permitted schools to operate with reasonable budget increases.

By far the most important issue facing optometric education in the next 20 years will be how to continue to deliver a high quality professional education without continuing to raise tuitions at twice the rate of inflation as we have done for the last 20 years. Student indebtedness will force constraints on schools’ abilities to fund increases in the costs of education from tuition and will create an unprecedented demand for increases in productivity. This will dramatically change how optometry schools (and all institutions of higher education) operate, but will especially impact curricula that require a low student/faculty ratio. This issue will emerge early in the 20-year window.

Alan L. Lewis, O.D., Ph.D.
President
The New England College of Optometry

I believe optometric education over the last 20 years can be summed up as “expansion.” It’s hard to name another profession with such extensive expansion in a short period. We have changed from a non-pharmaceutical, legislatively-limited vocation to a primary, gatekeeper profession for eyecare. In recent years professional association meetings were characterized by maps documenting states’ expansion into new fields: DPAs, TPAs, glaucoma treatment, oral medications and now lasers. Optometric education expanded to develop entry level skills and upgraded the profession with continued education. The key theme for the next twenty years will be “specialization.” As the optometric curriculum becomes saturated, advanced training in specialties, such as those provided in residencies, will become more essential. Optometric education will respond with more specialized training as our profession moves beyond primary eyecare to advanced competencies. Optometric education will lead us into new technologies and eventually optometric specialties.

Larry D. Stoppel, O.D.
Chair
Accreditation Council on Optometric Education
The most important developments in optometric education over the past 20 years have been:

- Expansion in the number of residency programs
- Exponential growth in the number of externship experiences
- Gender demographic changes
- Broader, more comprehensive state practice acts
- Student debt

During the next 20 years, I see the most important developments in the following areas:

- Residency completion/ board certification requirement for practice
- Growth of optometric fellowships
- Tele-imaging
- Advanced technologies
- An increased emphasis on the teaching and provision of low vision and blind rehabilitation and an expansion of optometric research in visual rehabilitation and ocular therapies as a result of an aging population
- Provision of independent clinical experiences early in the professional program
- Genomics
- Student debt

During the next 20 years, the profession may be able to absorb more clinicians easily due to different practice patterns. It has been said that female clinicians maintain shorter office hours due to more competing demands between office and home. To the extent that this may be true, it translates into a lower number of patients per doctor. Second, with more female students, women's health issues may become more prominent in the curriculum. The medical school curriculum has been criticized for an under-emphasis on women's health and different physiological norms. As the medical school curriculum responds to this criticism, other health professions curricula may be revised in a comparable manner.

These changes, which I regard as positive, are the direct result of the women's movement that gained traction in the 1970s. Before that time, many very talented individuals were restricted, professionally, to teaching, nursing, and related female-dominant occupations. The real problem for optometry and other professional academic programs is the lower standards and/or enrollments with which we would be struggling if the restraints that limited women's career opportunities had not been removed.

The most important, if not critical, issue facing optometric education in the next two decades is RESOURCE DEVELOPMENT. It hovers over everything we do and, more importantly, limits our ability to plan for the future. The optometric education enterprise is substantially underfunded in almost all areas of institutional concern. There is a paramount need to infuse major new and incremental resources in both human resource capital (faculty and staff) as well as new and modern physical facilities, including major new clinical enterprises. Without adequate resources, we will be hampered in our progressive developments in the years ahead.

Alden N. Haffner, O.D., Ph.D.
President, State University of New York, State College of Optometry

IN THE NEXT 20 YEARS, GENOMICS WILL PLAY AN INCREASINGLY IMPORTANT ROLE IN OPTOMETRIC EDUCATION. OPTOMETRIC PRACTICE AND OPTOMETRIC EDUCATION NEED TO RECOGNIZE AND WELCOME THE OPPORTUNITIES INHERENT IN THE GENOMICS BREAK-THROUGH. BY UTILIZING AND CONTRIBUTING TO THIS EMERGING SCIENCE, WE HAVE THE ABILITY TO JOIN WITH OUR COLLEAGUES IN OTHER HEALTH PROFESSIONS IN PURSUIT OF A WORLD COMMUNITY WHERE THE POPULATION AT LARGE BENEFITS FROM AN IMPROVED LEVEL OF HEALTH AND BETTER QUALITY OF LIFE. ON THE OTHER SIDE OF THAT COIN, WE HAVE A RESPONSIBILITY TO JOIN WITH OUR COLLEAGUES IN ENSURING THAT GENOMICS NEVER BECOMES AN EXCUSE FOR DISCRIMINATION OR EXCLUSION, "BASED ON SCIENCE." IT IS ESSENTIAL THAT WE UTILIZE EDUCATION IN PREPARING OPTOMETRISTS TO USE GENOMICS WISELY.

Leland W. Carr, O.D.
Dean
Pacific University College of Optometry
When one lectures on the same subject matter for a period of years, it is possible to deliver the material as if on automatic pilot. At such times we often don’t listen to ourselves, so it’s no wonder that students also aren’t listening. At other times – and thank goodness for these other times – we find ourselves infused with an unfamiliar energy when standing before a class, and we experience the joy of creation at the podium. My best day in optometric education was one such time.

I had just come back to campus from the neuro-ophthalmology department at one of Harvard’s teaching hospitals. It was 5:30 PM on a “dark and stormy,” February evening. Like the students, I was reluctant to begin the tried and true two-hour presentation on anisocoria, a lecture I’d given many times before.

However, for no reason I can identify, rather than turning to my fully-loaded slide carousel (today we would say “fully-prepared Powerpoint”), I went to the white board and drew out the circuit diagram for control of the pupils, starting with the muscles in the middle and extending to the right and to the left in a straight line. It was not anatomically correct, but it did show the functional relationships among the components. Some of the students remarked that it was the first time they had understood how the parts worked together, the first “aha” moment of the evening, and they were awake, too!

Then I realized that each section of the pathway had its own differential diagnosis. This thought was not original, but for me at the time it was a novel insight. I had come to a new and better way of looking at the subject matter in the moment of speaking in front of the class. Abandoning my prepared notes, I then explained the process of locating the pathology along the pathway. By the end of the lecture, the board showed the control pathway, and under each section there was a list of potential diagnoses, each having the potential to affect that part of the system.

The students applauded. They got it! I had unearthed a better way to teach the topic, and I had acquired a deeper understanding of it myself. Moreover, I realized that this was a better way to teach all of neuro, not just pupillary anomalies: review the relevant circuitry, verbalize the cognitive process of locating the problem within the circuitry, and finally, for each location, provide the differential, a manageable and concise set of possibilities. Not only was my lecture suddenly more comprehensible to students, but it matched how one should think through the problem in clinic.

The next day I began to re-write all my neuro lectures to conform to the structure I had discovered the previous night. I had actually created the proverbial better mousetrap while at the podium, making this my Best Day in Optometric Education, and the applause of the students didn’t hurt, either.
Preparedness of Optometry Students for Discussing Visually Devastating Eye Disease

Elyse L. Chaglasian, O.D., F.A.A.O.
Jason Hafner, O.D.
Ryan Ellwein, O.D.
Daniel K. Roberts, O.D., M.S., F.A.A.O.

Abstract

PURPOSE: To investigate the self-perceived preparedness and comfort level of third year optometry students to discuss potentially visually devastating eye diseases with patients.

METHODS: During the period from May 2001 to May 2002, a 20-question survey was distributed to all Illinois College of Optometry (ICO) third year students at the completion of their first and fourth quarters of patient care. The study sampled three separate cohorts of students. Subject responses were graded by gender, age, and survey administration date.

RESULTS: Among the entire group responding, 67 of 128 students (52.3%) reported examining a patient with a serious eye condition during their first quarter and 69 of 93 students (74.19%) during their fourth. There was a tendency for males to report a greater comfort level than females after the fourth quarter (P=0.08), but not after the first quarter (P=0.42). There was a difference in self-perceived preparedness in the overall group between the first and fourth quarters (P<0.001). Subgroup analysis by gender showed a similar trend among females and males; however, statistical significance was reached for the males (P=0.002) but not the females (P=0.15). Male students tended to be more involved in patient education (P=0.02) than female students.

CONCLUSION: These data suggest that self-perceptions in preparedness and comfort in delivering "bad news" to patients may differ depending on student gender.

KEY WORDS: communication, bad news, preparedness, comfort, gender

Introduction

While optometric education continues to provide better opportunities for diagnosis and management of ocular anomalies, there are no indications that the students are more or less prepared to deliver the news that the diagnosis might uncover. Little or no time is designated in the didactic curriculum for doctor-patient interactions, and, in most instances, has not been updated for some time. More often, it is left up to the student doctors to individually determine how best to relate to their patients. While this may be adequate in routine cases, it may prove disastrous in patients with serious ocular disease. The emphasis in medical training has traditionally focused on technical proficiency rather than communication skills. Ury et al suggested that first year internal medical residents charged with delivering end of life communication often rated themselves as lacking in comfort and skill levels. Areas of concern with this perceived inadequacy included a lack of classroom teaching, lack of clinical observation and limited clinical experience. Billings and Block concluded that the teaching of communication is mostly elective, taught prior to entry to clinic, focused on knowledge rather than attitudes, and lacking in properly trained faculty.

There is, however, an increasing awareness throughout the community of medical education that formal teaching in communications, and specifically in breaking "bad news," is essential. The problem remains that while there are numerous recommendations for what needs to be done, there is little data about what is being done. Placek and Eberhardt conducted a small survey of physicians, where they recall a time when they delivered bad news to a patient or family member. Their responses indicated that the majority follow the published advice on breaking bad news to patients which includes: providing a private, comfortable place; giving the news in person while sitting close to the patient; preparing the patient for the news; attempting to find out what the patient already knew; presenting the news thoughtfully and with empathy; using simple language; proceeding at the patient's pace; exploring the patient's feelings; and conveying hope. However, even with these guidelines, almost 30% reported above mid-level stress associated with the delivery of the bad news, and 86% reported that the stress lasted beyond the encounter itself. The authors suggest that this may compromise subsequent interactions with other patients and that training of students and residents should include material on coping skills.

"Bad news" has been defined in the medical literature as pertaining to situations where there is a feeling of hopelessness, a threat to a person's mental or physical well being; a risk of upsetting an established lifestyle, where a message is given that conveys to an individual fewer choices in his or her life as information that changes a person's view of the future in a negative way, or that results in a cognitive,

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References:


behavioral, or emotional deficit in the person receiving the news that persists for some time after the news is received.4 Relaying to patients that they have an ocular condition that may potentially cause severe vision loss could have a tremendous emotional effect on them, and thus needs to be delivered in an empathetic and accurate fashion. The way this initial transaction is handled lays the groundwork for a potentially lengthy relationship between the doctor and patient. Improper communication of such important information can lead to mistrust of the physician, anger, fear, poor compliance with treatment and ultimately a poor therapeutic outcome. It can also be stressful for the provider of the bad news. It is understandable that a student clinician would feel uncomfortable, insecure, or emotional when faced with such a difficult task, especially when doctors with years of practice experience often feel inept in these situations as well. Doctors have limited access to communication skills training, as continuing education courses focus primarily on improving knowledge base and technical skills. This uncertainty can cause doctors to emotionally distance themselves from patients, at a time when the patient needs them to be most compassionate. It is also problematic, as senior faculty are relied upon to be role models for junior faculty, residents, and student clinicians.

There is evidence in the literature that training has a positive impact on the confidence of clinicians and attitudes about their communication skills.2,7,8

However, Moorhead et al showed that even when attitude and knowledge of communication skills had improved, there was limited intention on the part of the senior physician to bring that change into clinical practice. This arises from the physician’s fear and frustration of not being able to provide a swift resolution to the patient’s illness. The literature suggests that physicians who receive formal communication courses while in training are able to retain and utilize these patient-centered communication skills more effectively than those practitioners who did not.

Students at the Illinois College of Optometry (ICO) receive two hours of coursework in communications in their third professional year, which includes a video on “How to Break Bad News.” At the beginning of their third year, they begin performing primary care examinations on clinic patients under the supervision of attending faculty. This study focused on optometric students’ self-perceptions of their level of preparedness and comfort to deliver “bad news” and to discern particular areas that may be lacking and need to be addressed in the didactic or clinical curriculum in the future.

Methods
Third year ICO students were asked to voluntarily complete a brief written survey to ascertain their level of comfort and preparedness when they examine a patient at risk for permanent visual loss. Permanent visual loss was defined as “having the potential for vision loss of at least 20/200 in one or both eyes.” The questions focused primarily on their optometric education and clinical experiences and did not seek to identify detailed opinions of their abilities and sensitivities to receiving or delivering bad news. The survey consisted of 19 questions, with space allocated for additional comments. Identical surveys were distributed to the students’ on-campus mailboxes, at the end of their first (summer) and fourth (spring) quarters of patient care. The survey eventually involved three separate cohorts: the Classes of 2001, 2002 and 2003. All responses remained anonymous. The Institutional Review Board of the Illinois College of Optometry approved this study. Analysis consisted of descriptive summaries of subject demographics and their survey responses. Contingency table analyses were utilized for group comparisons relative to categorical data and to evaluate possible trends relative to ordinal data. Data analysis was carried out using the SAS® System, Release 8.1 for Microsoft Windows® (SAS Institute, Inc., Cary, NC, USA.)

Results
Surveys were returned and analyzed from 221 students, 128 from the first quarter and 93 from the fourth quarter. (Table 1) The ages of the respondents at the time of survey completion included 82 respondents who were between 20-24, 126 who were between 25-29, and 9 were greater than 29. Gender was evenly divided, with 111 female, 109 male, and 1 not indicated. Of first quarter students, 52% reported having a patient encounter that involved delivering bad news, while 74% of fourth quarter students indicated having this type of patient encounter. This increase in delivery of bad news cannot be accounted for by greater exposure to patients with more severe ocular disease since third year clinicians do not rotate through sub-specialty clinics, such as glaucoma, retina, and cornea. Glaucoma was the primary diagnosis indicated, followed by diabetic retinopathy, age related macular degeneration and vascular occlusive disease.

A majority of respondents indicated that they were actively involved in the education of their patients about their condition, with an increase seen from the first to the fourth quarter (53% vs. 79%). However, the male students consistently reported greater involvement than their female classmates. In the first quarter, 65% of males vs. 44% of females reported direct involvement in patient education, and while the percentages increased for both genders,

<table>
<thead>
<tr>
<th>Table 1: Third Year Students by Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Summer</strong></td>
</tr>
<tr>
<td>(First Quarter)</td>
</tr>
<tr>
<td>Male (N=62)</td>
</tr>
<tr>
<td>Female (N=65)</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>(Fourth Quarter)</td>
</tr>
<tr>
<td>Male (N=47)</td>
</tr>
<tr>
<td>Female (N=46)</td>
</tr>
<tr>
<td>20-24</td>
</tr>
<tr>
<td>40.3%</td>
</tr>
<tr>
<td>55.4%</td>
</tr>
<tr>
<td>25.5%</td>
</tr>
<tr>
<td>26.1%</td>
</tr>
<tr>
<td>25-29</td>
</tr>
<tr>
<td>53.2%</td>
</tr>
<tr>
<td>44.6%</td>
</tr>
<tr>
<td>68.1%</td>
</tr>
<tr>
<td>69.6%</td>
</tr>
<tr>
<td>29+</td>
</tr>
<tr>
<td>6.5%</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>6.4%</td>
</tr>
<tr>
<td>4.3%</td>
</tr>
</tbody>
</table>

Optometric Education
the males continued to report more involvement in the fourth quarter (89% vs. 68%). This was statistically significant at p=0.02.

As would be expected, students of both genders reported a statistically significant (p<0.001) level of preparedness later in the year (99%), than at the beginning (87%). When queried if their education at ICO and its clinical affiliate, the Illinois Eye Institute (IEI), had adequately prepared them to deliver the news to patients of a potentially visually debilitating disease, the overwhelming majority agreed that it had: 91% in the first quarter, 97% in the fourth quarter. Summer students indicated that this was due to a combination of classroom and clinical experience (65%), with 16% attributing their preparedness to something other than formal education, i.e., life experience. Spring students demonstrated the importance of numerous patient encounters in the learning of communication, with 18% indicating that clinical experience alone prepared them, 42% ascribing their preparedness to the combination of classroom and clinical education, and 18% to something other than formal education. For the minority of respondents who felt that their education had not properly prepared them for delivering bad news, the number one suggestion for improvement was increased clinical exposure, followed by more classroom discussion or role play, and more immediate feedback from the staff doctor involved in the case.

Students who reported playing an active role in patient education did not vary significantly from the first to the fourth quarter (p = 0.86) in their self-perceived comfort level. However, gender differences did come into play once again. While there is not a statistically significant difference in summer quarter between male and female students (p = 0.42), there is after spring quarter (p = 0.08). Additionally, while the males report an increasing level of comfort throughout the year (90% to 93%), the female students report feeling less comfortable (83% to 76%) later in the year with this type of patient encounter. (Table 2) This level of discomfort did not appear to be tied to other variables such as the age of the patient, whether it was the initial or a follow up visit, or a particular diagnosis. It has been documented in the literature that female students are more empathetic, humanistic and vested emotionally in their patient's well-being.14 Perhaps the same sensitivity that forging a close bond between a patient and a female physician also conversely causes the female student to be uncomfortable with delivering bad news. Another explanation is that greater value is still placed on knowledge and technical proficiency and not on patient communication by medical educators and professionals. This attitude, which may be subtly insinuated as opposed to overtly related, may cause the female student to be uncomfortable with her own emotional attachment to her patient. Additionally, patients bring their own preconceived prejudices to the examination. Research has shown that patients express the greatest satisfaction with older, male physicians, and the least satisfaction with younger, female physicians.15,16 This attitude may cause a young female student to lose confidence if she feels she is being judged as inadequate by her patient.

### Conclusions

Appropriate patient-doctor communication is essential, especially for those patients who might be faced with life or vision threatening diseases. Patients want and expect a clinician who can provide them with knowledge of their condition, explain the risks, probable outcomes and treatment options, and provide this information in a manner that allows for emotional comfort and support. Medical education is slowly embracing the concept that breaking bad news to patients needs to be part of the core curriculum, and not something that is best learned through trial and error. Generally less than 5% of the curriculum time in medical education is spent on training in communication skills.1 This is consistent with the program at the Illinois College of Optometry, where just 2.8% of lecture and lab hours are devoted to communication skills. There are several modalities outlined in the literature on how to teach the breaking of “bad news,” but there appears to be no general consensus on what works best or what should be uniformly adopted. Some programs utilize only lecture, while others incorporate videos with discussion, small group exercises, and role play. Others advocate medical students taking responsibility for developing their own communication skills through a weekly pairing of students who practice on their own time, a weekly group facilitated review meeting, and weekly written evaluations on how and what they are learning. These groups were also encouraged to partner with someone with whom they had little in common, to expand their capacity for empathy by exposing them to differences in culture, race, sexuality, class and temperament.17 It was felt that this type of course would foster personal responsibility for learning in a non-threatening, non-competitive environment, where the students learn from each other. Students positively perceive courses on breaking bad news and feel the courses add to their sense of competence and are helpful in formulating strategies.

The reliance on modeling the communication behaviors of attending faculty may also be erroneous. A survey by Maheaux et al reported that 40% of clinical students believed that their teachers did not behave as humanistic caregivers or were good.

### Table 2: Third Year Student Survey Responses by Quarter

<table>
<thead>
<tr>
<th></th>
<th>Summer (First Quarter)</th>
<th>Spring (Fourth Quarter)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (N=62)</td>
<td>Female (N=65)</td>
</tr>
<tr>
<td>Comfort level</td>
<td>90%</td>
<td>83%</td>
</tr>
<tr>
<td>Preparedness</td>
<td>90%</td>
<td>83%</td>
</tr>
<tr>
<td>Involvement in</td>
<td>65%</td>
<td>89%</td>
</tr>
<tr>
<td></td>
<td>Male (N=47)</td>
<td>Female (N=46)</td>
</tr>
<tr>
<td></td>
<td>93%</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>44%</td>
<td>68%</td>
</tr>
</tbody>
</table>
role models in teaching the doctor-patient relationship. Practicing doctors often feel as incompetent delivering bad news as novice clinicians, and perhaps more so, as their medical training and continuing education courses are more limited than the student’s. Buckman9 describes some of the fears that doctors manifest when faced with breaking bad news. For younger physicians, some of their greatest fears include the fear of being blamed for the illness, fear of the unknown or the untaught, fear of the patient’s reaction, fear of expressing emotion, and a personal fear of illness and death. Ptesek and Eberhardt describe the anticipatory stress that physicians experience that peaks during the clinical encounter.9 Stress from these encounters may interfere with a physician’s ability to address the patient’s needs and may contribute to burnout.4 While many believe that communication skills are something you either have or don’t have, a variety of studies have demonstrated that these skills are teachable.7

Not surprisingly, students responding to our survey reported a statistically significant greater level of preparedness at the end of a year of clinical experience than at the beginning. Unexpected, and noteworthy, was the discrepancy between the genders in the self-reported comfort levels and involvement in patient education, with increasing disparity at the end of the year.

Our student survey raises questions about the importance of both classroom and clinical learning in preparing the student clinician to feel comfortable in situations of providing “bad news” to the patient. However, students’ first formal course in communications coincides with their entry into clinical care. It may be that teaching communication skills in the pre-clinical years may be more beneficial and reinforced when students are in direct contact with patients. An unexpected finding was the significant difference in gender attitudes. While our study was not designed to elicit gender personality traits, there have been numerous studies that concluded that male and female doctors differ in their communication styles with patients. Female physicians tend to show more empathy, give emotional support and reassurance, and encourage patient input. Males, on the other hand, are more likely to give instructions and be more verbally dominant.

Hall et al explored the relationships between physician gender, patient gender, communication and satisfaction.16 Both male and female patients were significantly less satisfied with youthful appearing female physicians. However, in the situation involving a female patient and female doctor, more psychosocial problem talk and more interruptions by both parties predicted greater patient satisfaction. In contrast, with the combination of male physician and male patient, less psychosocial talk and fewer interruptions were associated with greater satisfaction. This suggests that interruptions have different meanings to the different genders. When one or both participants are male, interruptions may take on overtones of conflict or dominance, with associated negative implications. By contrast, with two women, interruptions indicate positive involvement and enthusiasm, which leads to greater patient involvement. While trying to identify the exact causes of the lower satisfaction with young female doctors, the authors hypothesize it may be due to patient prejudice, disrespect, or some unmeasured behaviors by these physicians that trigger less positive patient satisfaction. While the female physician is valued for her communication performance, her input may be overshadowed by some inferred lack of authority or expertise because of her youth and gender.12 This may provide us some insight in a profession where the majority of students are female, and whose average age upon entrance is twenty-four years. Women now account for the majority of students currently enrolled in optometry schools (57.4%) as well as recent graduates (54.7%).13

Our results, and those of other authors, are a strong signal to those in charge of optometric curriculum issues that these gender differences need to be recognized and addressed, with greater emphasis given not only to communication skills in general, but to gender differences specifically.

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Teaching Optometry Students Empathy For Patients with Low Vision

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Diana Shechtman, O.D., F.A.A.O.

Abstract

Purpose: To evaluate the effectiveness of vision impairment simulator goggles for teaching students about empathy for low vision patients. Methods: Optometry students wore low vision simulator goggles intermittently during different activities of daily living and instrumental activities of daily living. They then wrote a short essay and answered an anonymous survey about their experience. Results: The response to the simulator exercise was overwhelmingly positive. Conclusions: Empathy for patients is an intangible skill that cannot be taught in a lecture setting; however, this study demonstrates that empathy can be taught by simulated low vision experience, enhancing the educational experience of optometry students in a vision rehabilitation course. Key Words: low vision, vision impairment, empathy, simulated low vision, simulator goggles

Introduction

Dorland’s Illustrated Medical Dictionary defines sympathy as “sharing of a compassion for another person’s thoughts, feelings, and experiences.” On the other hand, empathy is defined as “intellectual and emotional awareness and understanding of another person’s thoughts, feelings, and behavior, even those that are distressing and disturbing.” Although many physicians sympathize with their patients, unless they understand the patient’s feeling they will not be able to achieve empathy. As Spiro explained: “To discern sadness on someone’s face one must have experienced sadness sometime in his or her life.”

Empathy is imperative in building trust between the patient and the doctor, maintaining patient autonomy, and increasing patient compliance with treatment regimens. Empathy is an essential part of providing care for the low vision patient. These patients may suffer from depression and isolation. Some feel that no one comprehends their situation and thus, they mistrust many around them, including their health care providers. Empathetic communication through the comprehension of the patient’s feelings can allow the eye care physician to achieve a more assertive manage ment plan for the particular patient.

Unfortunately, as stated before, many doctors do not regard their patients with empathy; on the contrary they are emotionally separated from them. The core of the problem begins early on in their medical career. Reports state that medical students have a declining trend of empathy as their academic career broadens. Students may enter medical school with a compassionate attitude towards patients but become less compassionate towards their patients as they further their clinical experience. Thus, teaching empathy is crucial in the health care profession, and yet, it is a major challenge for educators.

In order to overcome this obstacle, efforts have been geared towards the teaching of empathy through “emphasis on history-taking,” role modeling, clinical courses, role-playing, and patient-simulation. Simulation, in our opinion, is the most effective way to teach empathy. Through simulation one can actually know how the patient feels rather than state they know that the patients feel a particular emotion. In order to enhance patient care, it is necessary to comprehend the patients’ feelings and attitudes towards their problem. There is sparse information in the literature with regards to the use of patient simulation to teach empathy.

This study examines the effectiveness of using vision impairment simulator goggles in activities of daily living (ADL) and instrumental activities of daily living (IADL) to teach optometry students about the functional effects of vision impairment, as well as patient empathy.

Methods

Institutional Review Board approval from the University of Alabama at Birmingham was obtained prior to beginning this study. All third year optometric students in the low vision rehabilitation course during the years 1999 and 2000 participated (n=77). The students taking the course were concurrently assigned to work in the Ocular Disease and Low Vision Service with fourth year interns under the supervision of an attending optometrist.

Vision impairment simulators were made by modifying welder’s goggles to simulate different eye conditions.
including cataract, diabetic retinopathy, glaucoma, and macular degeneration (Figure 1).

The optometry students were asked to wear the low vision simulators during the first week of the Low Vision Rehabilitation course (Figure 2). The simulators were worn initially during a classroom exercise involving both near and distance tasks. They then took the simulators home to use intermittently over a one-week period while performing different activities of daily living. Tasks involving driving and operating machinery were strictly prohibited. Students were encouraged to use their judgment and participate only in activities that they deemed safe while wearing the simulators.

Students then wrote a short essay regarding their simulated low vision experience. The specific instructions that they received were to write a 1-page typed summary of their experience of performing everyday tasks under simulated low vision conditions and to discuss ways that they found to compensate for their decreased vision. The essay was a required assignment for the course and was due one week after the students received the goggles.

At the conclusion of the course, students anonymously and voluntarily rated eight statements on a strongly agree to strongly disagree Likert scale (Table 1). Since they already had the opportunity to comment on their experience through the essays that they wrote, no open-ended questions were included in the survey.

Results

All third year optometric students in the low vision rehabilitation course responded to all survey questions (n=77). The response to the simulator exercise was overwhelmingly positive (Table 1). Students felt that the simulators were an effective means to simulate vision impairment and that it enhanced their ability to provide care for low vision patients. They reported that the simulators enhanced their

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The low vision simulators are an effective means to simulate vision impairment.</td>
<td>37.6%</td>
<td>57.1%</td>
<td>2.6%</td>
<td>2.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Using the simulators in the classroom taught me empathy for school age patients.</td>
<td>42.9%</td>
<td>44.2%</td>
<td>10.4%</td>
<td>2.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Using the simulators during everyday tasks taught me to think about compensatory strategies that might benefit persons with visual impairment.</td>
<td>48.1%</td>
<td>45.5%</td>
<td>5.2%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Using the simulators enhanced my awareness of difficulties that might be encountered by persons with visual impairment.</td>
<td>48.1%</td>
<td>48.1%</td>
<td>2.6%</td>
<td>1.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Using the simulators in every day tasks taught me empathy for low vision patients.</td>
<td>46.8%</td>
<td>46.8%</td>
<td>5.2%</td>
<td>1.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>I was better prepared to provide care for low vision patients after my simulated low vision experience.</td>
<td>19.5%</td>
<td>48.1%</td>
<td>26.0%</td>
<td>3.9%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Overall, this experience was a valuable part of the low vision course experience.</td>
<td>35.1%</td>
<td>51.9%</td>
<td>9.1%</td>
<td>3.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>The simulators taught me things about low vision that cannot be learned through typical lecture experiences.</td>
<td>37.7%</td>
<td>49.4%</td>
<td>11.7%</td>
<td>1.3%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Figure 1

Vision impairment simulators made from welders' goggles. Goggles were made to simulate peripheral field loss (e.g. glaucoma, retinitis pigmentosa), central field loss (e.g. macular degeneration), and overall decreased acuity/contrast (e.g. cataract). The goggles were constructed by inserting clear cellophane and tinted cellophane to decrease clarity and contrast. In addition, construction paper was used to simulate field loss (centrally or peripherally). The figure shows the goggles assembled and the component parts.

Figure 2

Class wearing vision impairment simulator goggles.
Table 2
Common Observations within Students’ Essays in Regard to their Experience of Performing Daily Tasks Under Simulated Low Vision Conditions

<table>
<thead>
<tr>
<th>Compensating strategies that may benefit LV patients</th>
<th>Simulators enhance awareness of difficulties</th>
<th>Taught them empathy &amp; now they feel better prepared to provide care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increase lighting</td>
<td>• Working through dark environments became a hazard</td>
<td>• One can comprehend reasons why some patients may feel helpless and discouraged</td>
</tr>
<tr>
<td>• Relying on other senses, like touch</td>
<td>• Task took longer than before</td>
<td>• Better understanding of the patient’s limitations</td>
</tr>
<tr>
<td>• Relative size magnification</td>
<td>• Easy tasks became intricate chores</td>
<td>• In the health care field empathy is imperative, especially when evaluating low vision (LV) patients</td>
</tr>
<tr>
<td>• Relative distance magnification</td>
<td>• Maneuvering around home became perplexing</td>
<td>• One must show patience and understanding when evaluating/treating LV patients</td>
</tr>
<tr>
<td>• Modifying contrast &amp; colors between carpet/walls and furniture</td>
<td>• Finding anything was almost impossible</td>
<td></td>
</tr>
<tr>
<td>• Turning head to compensate for decreased field of view</td>
<td>• Determining depth became a major task</td>
<td></td>
</tr>
<tr>
<td>• Using eccentric viewing</td>
<td>• Allowing others to help them accomplish everyday tasks</td>
<td></td>
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<td>• Allowing others to help them accomplish everyday tasks</td>
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Discussion
This study demonstrates that vision impairment simulators can enhance optometric education in a low vision rehabilitation course. Optometry students perceive a benefit from experiencing simulated low vision and they feel this activity will enhance their abilities as care givers. The essays that were written clearly indicated that the simulators made students acutely aware of some of the problems that low vision patients may encounter. It also gave them the opportunity to find solutions to the limitations they experienced. These solutions, such as using increased illumination, could then be shared with future patients. Students reported that this experience enhanced their awareness of difficulties that might be encountered by people with vision impairment and compensatory strategies that may be beneficial. They reported that the simulators taught them empathy for low vision patients and that they were better prepared to care for low vision patients after the experience.

There have been other studies that similarly demonstrated that empathy could be learned through the use of simulated patient experiences. For example, Seaberg et al. found that having their emergency department residents register and go through triage on their first day of residency enhanced residents' empathy with patients and improved their attitudes towards patient care.15 Another study by Bruton and Radecki conducted at the Long Beach Memorial Medical Center admitted family practice residents overnight with a specific diagnosis. Staff was blinded to the study. The results showed that 87% reported that the experience impacted their later patient care experiences. The study found that by experiencing first hand what it was like to be a patient, the residents were in a better position to prevent some of the alienating experiences that can occur in the hospital.16

The prevalence of adult vision impairment (vision 20/40 or worse) in the United States is estimated at 2.85%.16 However, most of those people do not have severe vision impairment. Therefore, many people do not know and have not encountered a person with significant vision impairment. The use of vision impairment simulators helps to prepare students for interaction and clinical encounters with persons with permanent vision loss. Laboratory exercises involving simulators not only teaches the student-doctor how to perform techniques, but also teaches the student- patient how difficult it is for a low vision patient to answer questions and follow instructions during an examination. Without this experience, interns might expect all patients, even those with low vision, to be able to discern between +/- 0.25D. Home exercises involving the use of vision impairment simulators completes the experience by enhancing students' awareness of the many difficulties outside the exam room that a low vision patient may encounter.
According to Halpern, empathy has as its goal imagining how it feels to be in another person’s situation. This exercise certainly allows the student to experience first hand the difficulties that a person with low vision might encounter.

Non-optical devices and adaptations are an important part of the counseling provided in a low vision evaluation. The use of the simulators at home for ADLs and IADLs prompted students to develop compensatory strategies to deal with their sight impairment. For example, several reported that they needed to use flashlights in their closets to choose their clothing. Others reported that they needed to sit at very close range to the television to enjoy watching it. The need for good organization skills was also a recurrent theme, as the students commented that it was much easier to find things that were in their proper place. This experience is likely to emphasize for students the importance of good lighting and contrast, for example, in a way that no lecture could. Additionally, the students had completed all ocular pathology courses at the time of the survey and still reported benefits of the low vision simulation, suggesting that understanding eye pathology alone is not sufficient to gain a functional understanding of vision impairment.

Limitations of this study include the self-reporting of data and the lack of measurements of clinical correlation. The survey instrument was developed specifically for this exercise and has not been previously validated. However, it does have face validity. This is a concept paper about empathy development, a concept that is difficult to measure. Empathy is difficult to teach, and further studies and ideas to develop empathy among our students are necessary.

Conclusions

The ability to empathize with low vision patients is a skill that enhances the clinician's ability to help those patients. Using goggles to simulate vision impairment in settings outside traditional laboratories enhances the educational experience of optometry students in a vision rehabilitation course. Students become more aware of the impact of vision impairment on daily life through the use of low vision simulators during ADLs and IADLs and are thus better able to empathize with the patient. Future studies to examine the usefulness of this educational tool to measure empathy of optometric students for their low vision patients needs to be addressed.

References

Teaching the Balancing Act: Integrating Patient and Professional Agendas in Optometry

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Abstract

PURPOSE: We observed novice case presentations to identify the opportunities optometry students have to learn about balancing patient and professional agendas.

METHODS: Eight optometry students and 6 faculty optometrists were audio-recorded during 31 case presentations. Four students and 4 optometrists from the field observations were interviewed. We analyzed the data using a grounded theory method.

RESULTS: Students encountered patient and professional agendas that were both compatible (these instances typically involved appointment purpose and treatment options) and incompatible (these instances typically involved patient consent and guideline adherence).

CONCLUSIONS: Ideally through explicit instruction, optometrists facilitated the student's ability to negotiate these tensions by articulating the logic behind their actions.

Key Words: case presentations, patient agenda, professional agenda, professional identity

Optometrist Excerpts Regarding Patient and Professional Agendas

D4: What I really like to draw out of [the students] if I can is what are the options...how are you going to discuss those with the...person and come up with the one that's best for them. And sometimes that can be at odds with what you think might be best...[you] try and get them thinking...in terms of working with the patient to make decisions that ultimately will give you a good outcome...as opposed to just dictating findings and saying..., "This is what we're going to do"...which is very tempting sometimes. And some patients expect that too - that..."you're the doctor, you're going to tell me what to do."

D6: And there's other aspects of the examination that we forget about or that are easily forgotten about...we gaily sit there in the consulting room and say, "Oh, you need this, this and this. You should have progressive lenses and if you had this, it would be better for you" — forgetting that the patient actually has to write a cheque for that amount and they may not be in a position to do so...I really focus on the students giving the patients different options and allowing the patient to decide. I think whatever decision is made has to be a joint decision, even if you’re really making the decision for them — they need to imagine it’s a joint decision.

The comments of these two optometrists, who supervise optometry students in a teaching clinic, speak to the balancing act that students must learn as they negotiate the sometimes competing needs of the professional agenda (i.e., profession-defined duties regarding eye and vision care) and the patient agenda (i.e., patient preferences, concerns and expectations brought to a clinical encounter). The philosophy of patient-centered practice tends to elide the distinction between the patient and professional agendas, but our research suggests that this distinction requires attention. Acknowledging and addressing why patients make the eye appointment, what their expectations are of their optometrist and what they’re willing to accept as help must be balanced with profession-defined duties regarding eye and vision care. Many clinical experts would argue that their responsibility entails addressing both the patient and the professional agendas. To reach this position of owning both agendas, clinical novices must first learn to appreciate the distinctness of these agendas. Without explicit instruction, novices might view the patient agenda as the “other” agenda and thus fail to “own” it and integrate it into their practice.
Continuing advancements in healthcare, influenced in part by escalating healthcare costs and declining resources, place substantial pressures on healthcare schools to keep their students current in relevant technical skills, analytical skills, and the knowledge underlying their particular healthcare field. This rigorous training helps construct the students' sense of their professional agenda when providing patient care. Optometry licensing examinations, geared to assessing minimum or entry-level competence after graduation, maintain a sharp focus on evaluating extensive skills in knowledge, technique, and analysis. The development of practice guidelines by optometric colleges and associations has further helped define the professional agenda. For instance, the American Optometric Association has developed 20 written clinical practice guidelines covering care for patients with a range of conditions including diabetes, glaucoma, cataract, and age-related macular degeneration. (e.g., Cavallerano & Cooppan, 2002 for diabetes mellitus).

Concurrently, the evolution of healthcare and healthcare education has necessitated an increase in attention on the patient's agenda. Healthcare professional schools typically now include courses on professional communication, an addition that occurred within the past 30 years. More patient-centered and evidence-based models of care have highlighted the importance of the patient's agenda. The importance of the patient's agenda is brought into focus by the case presentation about balancing the patient and professional agendas that care providers must negotiate. We asked: • What opportunities are there for healthcare students to learn in situations where the patient's agenda is brought into focus? • Do students learn to balance these agendas explicitly or implicitly? This paper is one of the outcomes of a multi-disciplinary research program investigating the role of case presentations in the socialization of the healthcare professional.

Methods

This study used a qualitative research approach involving naturalistic observations of optometry students and optometrists during their daily interactions in a teaching clinic combined with individual participant interviews to solicit their reflections on their experiences.

Setting and Subjects

Following institutional ethics approval in the summer of 2001, a fourth year primary care rotation through a Canadian optometry school's on-site teaching clinic was studied. Fourth year optometry students rotate through the 9 clinical areas of the clinic over a 25-week period (they also spend 20 weeks in clinical placements outside the clinic). The Primary Care Clinic is the largest of the out-patient on-site clinics and it provides eye and vision assessments to patients over the age of 6 years.

At the time of the study, there were 20 fourth year students and 8 optometrists on faculty in the Primary Care Clinic. Recruitment for the study involved an in-class announcement of the study and individual letters were sent to all potential participants. The resultant study participants represented 75% of the faculty and 40% of the students: 6 optometrists on faculty and 8 fourth year optometry students enrolled in their 6-week outpatient Primary Care internship. The student participants were registered in the first 15 weeks of their 45-week internship year.

Data Collection

Field Observations

Thirty-one oral case presentations and the teaching exchanges related to them were observed and audio-recorded by trained research assistants. All observations were included in the data analysis. Eight optometry students (5 women, 3 men) and six faculty optometrists (2 women, 4 men) participated in the field observations. Repeat observations were purposefully distributed across the sample to track development of some students over time. Attempts to minimize the effect of the observer (Hawthorne effect) included the unobtrusiveness of the recording equipment and the observers' abilities (through similar dress, age and comportment) to blend into the group of 2 to 4 team members (e.g., other optometry students) present for the presentation. Any instance of an interaction between the observer and the participants was recorded in field notes by the observer to ascertain the overall authenticity of the observed session.
Five types of case presentation strategies have been observed in our study of novice case presentations: 1) Student strategies (e.g., seeking guidance from the instructor), 2) Doctor strategies (e.g., discussing the reliability of the patient’s history), 3) Teaching strategies (e.g., teaching by quizzing the student), 4) Identity Formation Strategies (e.g., describing a personal way of determining the appropriate reading addition), and 5) Case presentation & record keeping strategies (e.g., announcing each part of the case presentation). Sub-themes were noted within each of these five thematic strategies. The focus of this paper falls under the theme of Identity Formation and one of its two sub-themes, Individual practices. Two types of individual practices were noted: standards of practice and patient centeredness (highlighted grey text). Patient centeredness was explored by examining the tensions that emerged between the patient agenda and the professional agenda.

The observations were transcribed and rendered anonymous.

**Interviews**

A convenience sample of four optometry students (3 women, 1 man) and four faculty optometrists (2 women, 2 men) from the field observations was also interviewed. The 45-minute interview script reflected trends and issues arising from the observational data. Participants were asked open-ended questions about the nature and purpose of case presentations in the Primary Care rotation. During the interview, they also commented on two audio re-enactments of observed case presentations; incorporating reenactments had proved to be an effective interviewing strategy in an earlier phase of this research program. One audio-clip represented a less experienced case presentation attempt while the other was a more sophisticated effort. Interviews were transcribed and rendered anonymous.

**Data Analysis**

The analysis in this study involved qualitative methods that have also been described elsewhere. Consistent with a grounded theory method, the 137 pages of observation transcripts were individually read by four researchers for emergent trends in case presentation strategies. A coding structure emerged from examining, applying, refining and confirming these trends across the data. Within each strategy, common instances were clustered into themes and sub-themes. This iterative analysis process occurred during approximately 60 hours of group discussions with five members of the research team. Codes were further tested, expanded, contracted or deleted after application to the 84 pages of interview transcript data. A member of the research team applied the coding structures to the complete data sets using QSR NVivo qualitative data analysis software. Any difficulties or emerging patterns arising from this analysis were reported back to the research team for further analysis and revision.

**Results and Discussion**

Data analysis revealed five major case presentation moves or strategies, aspects of which are published:

1) Student Strategies, 2) Doctor Strategies, 3) Teaching Strategies, 4) Identity Formation, and 5) Case Presentation & Record Keeping Strategies. For each of the five major strategies, themes and sub-themes emerged that characterized the strategy (see Figure 1). This paper focuses on one aspect of the identity formation theme. Teacher-student exchanges that explicitly or implicitly shaped the student’s developing sense of professional identity were coded into this theme. These exchanges fell into two subcategories: Individual Practices (e.g., discussions regarding patient needs or standards of practice) and System Processes (e.g., discussions regarding patient billing procedures or referral strategies).
In this paper, we report on the subcategory of Individual Practices, in which faculty optometrists attempted to teach optometry students to identify and balance the complex and sometimes competing professional and patient agendas. We noted 57 instances in the case presentations where patient and professional agendas were considered in the dialogue.

Clinical novices must learn to identify and balance patient and professional agendas (see Figure 2). Compatibility occurs when the patient and professional agendas correspond or can co-exist (e.g., the patient’s reason for the visit is to get new glasses and the optometrist wants to perform a dilated fundus examination in view of the patient’s significant myopia). In the novice case presentations, we found examples of compatible agendas clustered around instances of appointment purpose and treatment options. Outside this area of compatibility, patient and professional agendas may be in conflict and the clinical novice must develop strategies for dealing with this tension. We found examples of incompatible agendas clustering around instances of patient consent and guideline adherence. Ultimately optometry students needed to weight one agenda more than another but the determination of which agenda should predominate was case specific. In the majority of the instances observed, supervising optometrists guided this determination; however, they tended not to make their rationale explicit, leaving the optometry students to independently hypothesize the justification for a given course of action.

Addressing Compatible Professional and Patient Agendas

Optometry students had to learn that, in addition to measuring certain features of the eye and visual system to meet professional standards, the patient’s agenda (e.g., the chief complaint) had to be factored into the outcome of the visit. Instances where students needed to demonstrate that they were considering both agendas occurred most often around the appointment purpose and the treatment options. In an example of the first type of instance, it became apparent well into the case presentation that the optometry student had not articulated for the supervising optometrist the patient’s reason for making the eye appointment. The supervising optometrist’s confusion about the examination’s purpose was apparent.

D1: The thing that strikes me as odd is...is there any particular reason she came in ‘cause her health is like...just a second, like...I kind of am thinking we’re missing something because her health is being looked at, she doesn’t have any problems with her glasses and seeing so did she -

S3: According to (receptionist’s name), it’s just so they can go look at new glasses.

D1: Oh, okay, so - so that is the reason.

S3: That is the reason.

D1: So the reason is she wants new glasses.

S3: Yeah, I’m going to fill that in [the patient record], yeah, yeah (D1: Okay) for sure.

D1: That - that would be important information to note that you are actually going towards a new prescription.

In this example, the optometry student failed to realize that the patient’s purpose in making the eye appointment was critical. The patient was receiving on-going eye care so this visit initially appeared to be redundant and without purpose. The optometrist tried to get the student to understand that this assessment should have been structured to meet the very specific needs of the patient. When problem-specific examination strategies are not employed, unnecessary tests may be done or necessary tests omitted.

In another example, an optometry student’s preliminary presentation of the patient was vague and did not include the patient’s purpose for making the appointment. A discussion of the student’s findings proceeded for some time before the supervising optometrist learned the patient’s purpose for being there.

S8: So this is a 64-year-old patient...I think everything looks pretty clear - nothing really jumps out at me as anything to be concerned with...
Presenting patients with numerous treatment options is another instance where optometry students learn to consider professional and patient agendas. In one example, the optometry student and supervising optometrist engaged in a discussion to clarify the patient's needs.

D1: Does he want new glasses?

S6: Ah, well he wants to not have headaches... (D6: Okay) so -

D6: But we need to establish really why he's getting headaches (S6: Hm hm) so we need to have a look at the pair that he's got. I don't want to just repeat the same thing (S6: Yeah) and he comes back and says “Well, I'm still getting headaches” (S6: Hm hm). Okay, well let me come and have a look [flipping chart] at him (S6: Okay). Okay, I'll be in, in just a second.

S6: Okay. I'll just mark his glasses.

It is apparent from the discussion that the student had not fully clarified the patient's agenda. Ideally, the student should have determined both the patient's concerns regarding the headaches and his preferences regarding spectacle correction. The optometrist pointed out that the cause of the patient's problem (headaches) must first be identified before the final lens prescription was determined. If the headaches were spectacle-related, the current lenses and examination results would have to be considered to avoid continuing or exacerbating the problem.

Repeated instances occurred in the case presentations where optometrists highlighted for the optometry students that they must consider and balance both the professional and patient agendas when choreographing and conducting the eye examination. Instances of compatible agendas provided an important opportunity for students to engage in this balancing act.

Addressing Incompatible Professional and Patient Agendas

Understandable conflict resulted from incompatible professional and patient agendas. We observed that these situations occurred most often in the novice case presentations around issues of patient consent and guideline adherence. A patient's refusal to give his/her consent usually permitted to declining a test procedure. The procedures patients most often declined were those requiring pupil dilatation either because the temporary after-effects of the drug (blurred vision, photophobia) would interfere with their plans after the exam or the procedure would extend the appointment length beyond what they had scheduled in their day. An example of the latter rationale follows.

S2: Basically she...has to go, so she declined the...dilated exam for today (D1: Okay)...I did... say...we'd like...for her to come in probably within a month, or something like that. She is free this Friday, so we can check to see if there's anything available.

The student, faced with a patient who refused a dilated fundus examination deemed necessary to adequately evaluate ocular health, established that the refusal was rooted in a time conflict rather than an overall refusal to comply with the test. The student's discussion with the patient allowed the student to understand that a compromise was possible to complete the needed procedure at a time more suited to the patient's schedule. In a teaching clinic, novice eye examinations can become protracted beyond the patient's expectations and the allotted appointment time. Completing the examination at no charge on another day was the solution toward which the student worked.

Sometimes the patient's consent to treat became a point of contention if the patient's solution to the problem was in conflict with the professional opinion. In the following example, the site of conflict rests in the treatment of presbyopia. The supervising optometrist wanted the student, when presenting treatment options to the patient, to place the most weight on one option (progressives); a strategy which the student revealed was not in keeping with the patient's agenda (bifocals).

D3: What kind of lens arrangement is he thinking of going with? Are you talking (?)?

S3: Um, we didn't talk about it too much...but the first thing he said was he wanted bifocals. But I haven't sat there yet and given him his options yet - like you know, explained the various possibilities.

D3: OK. Cause if he's going with the progressive, even better, and the higher ad, I'm even less hesitant to go with a higher ad,
The supervising optometrist wanted the optometry student to engage in a persuasive presentation of treatment options to the patient. Although the patient's input was to be sought when the student presented the various treatment options, the student was encouraged to guide the patient toward one particular treatment option. While patients often appreciate the professional's recommendation of a particular treatment option, tension can arise if the patient prefers a different solution. The student must learn how to address the ensuing tension that can arise when the agendas are in competition. This optometrist demonstrated a common strategy for dealing with incompatible agendas — persuade the patient to shift his agenda to a position more compatible with the professional agenda.

A more intense source of conflict arose in the multiple occurrences of patients not meeting regulated vision requirements. In these examples, the student needed to negotiate how to adhere to a professional guideline that was in conflict with a patient's agenda. In the following example, the student and optometrist engage in a protracted discussion about how to address the patient's current inability to meet the 6/12 acuity required by the governmental transportation ministry for a general driver's license.

D1: So can this person drive now?
S1: I guess not un- (D1: Until?) - until he gets a new prescription...
D1: So how are we going to handle this situation?
S1: Uhm, I guess we have to counsel him and say that we have to replace the lens as...quick as we can. Thing is, that's his only pair of glasses, so if...he did it here [the clinic] he would have to leave it. I'm thinking maybe [optician's name] has some of those blank lenses that she could just do right away...but...we'll have to see if they have them (D1: Right.) back there.

D1: But...we want to get him a correction - (S1: Yeah.) as quickly as possible because right now...(S1: Hm.) - he can't drive legally (S1: Okay.) with his current correction. (S1: Hm hm.) What if he drove here and doesn't want to get his glasses from us, then what?
S1: All we can do is counsel. And then, if he's not getting his glasses at all, [we've]...got to submit one of those Ministry of Transport forms - if he says, "I'm not gonna get glasses, that's it"...I don't think he will because he's already complained already, so... But we can - we can pull him down. We just have to counsel him and say that..."You're just past the standards and it may not be safe, okay".

D1: Hm Hm. Yeah...it's probably not safe for him to be driving with...his current Rx. So, but what about?
S1: Even that, you still have to submit a form because...he is required to wear his glasses now, so - I had to fill out one of those Ministry of Transportation forms.

D1: Right, but what if he says..."I'm going to get my glasses from somewhere else and...in the meantime before I get my new glasses...can I just wear these ones to drive"?
S1: Well, I'm saying it's not meeting the standard so...

D1: So, it's not safe?
S1: No, it's not safe enough to drive (D1: That's right.) with [these] glasses.
D1: Yep. Good.

'Sometimes they'll give you like a puzzled look like, "What are you talking about?"'. And then you know that you're...barking up the wrong tree.... If you're on the right track...they agree with you and they'll just let you keep talking. And it's interesting 'cause some clinicians - they know you're going down the wrong path and they'll let you keep going and going and they'll go with you even though they know you're wrong,... You don't know it...'til you're right at the end and then you're like, "Oh!!". It's brutal!!

The students' irritation with spending time "going down the wrong path" suggests they prefer more explicit instruction that is not demeaning so that they can understand the logic behind the instructors' actions. Without articulating their rationale,
"tacit messages leave students misinterpreting the optometrists' ways as idiosyncratic" rather than something that is rooted in evidenced-based knowledge (p. 806).

Implications
During the novice case presentation, optometry students routinely encountered opportunities where the sometimes competing needs of the professional and patient agendas could be identified and negotiated. These opportunities clustered around instances where these agendas were compatible (i.e., they could co-exist) versus other instances where the agendas were incompatible (i.e., in direct conflict). The main strategy demonstrated to students for dealing with incompatible agendas was to try to persuade patients to shift their agenda to be more compatible with the professional agenda. It would be interesting to evaluate the efficacy of this strategy in future research.

When possible during the case presentation, clinical instructors should seek to explicitly acknowledge these agendas and their ensuing tensions. By rendering the instructors' tacit expertise visible and explicit, such acknowledgement may assist optometry students as they learn to integrate relevant research evidence with patient values and their developing clinical expertise. By articulating the logic behind their actions, instructors can avoid the danger of students misinterpreting instructor comments as idiosyncratic. While the specific tensions that emerge may vary across different clinical settings, the case presentation remains an important site where clinical instructors can help shape the student's ability to manage these agendas and thereby locate their position in the profession and the healthcare system. As clinical instructors face the dual challenge of patient care and student education and often find teaching time limited in an outpatient clinic, optometry educators may want to look toward creating additional places in the curriculum where students can learn these important lessons. Additional opportunities may exist in courses on communication, ethics, case analysis and rounds for students to learn the balancing act needed to integrate patient and professional agendas.

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References

Footnotes
i Evidence-based medicine emphasizes the integration of best research evidence with clinical expertise and patient values (the latter are the patient's preferences, concerns and expectations brought to a clinical encounter). ii Grounded theory is an established, inductive, qualitative research method in which theory is developed from the data rather than the reverse. An iterative approach to data collection, data analysis and consultation with the research literature increases the 'density' of the themes and ensures that constructs driving the analysis reflect the data. iii Qualitative research methodologies do not rely on a pre-set number of data points to display rigor or significance. Themes and sub-themes must occur repeatedly and across the data set to be accepted as viable indicators of dominant issues. iv Interestingly, the optometrist did not follow-up on the student's vague answer regarding vision demands. Self-employed optometrists do not describe either the job or its visual demands and risks. v A Socratic questioning style involves asking a series of leading questions to which the instructor knows the answers and through which the instructor knows the intended course of the discussion.
This Isn’t Your Grandmother’s Magnifier!

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Technology not only has changed the way we teach our students but it has also broadened the opportunities for how we treat our patients. Advances in technology especially have changed the lives of our patients with visual impairment.

Magnification is still the primary tool used in managing patients with low vision. However, some newer devices are giving an updated spin to this familiar concept. Have you seen the new full color portable electronic Quicklook magnifier (www.quicklook.com)? This amazing device only weighs about ten ounces and can easily fit inside a pocket or purse. The unit alone provides up to 5.5 x magnification, making the device useful for reading medicine bottles, perusing a bus schedule, or signing a check.

Check out the new BrailleNote PK device from HumanWare (www.humanware.com). This incredible aid is the world’s smallest Braille and speech personal digital assistant. If you’re thinking raised dots on thick paper, think again! This powerful PDA uses Bluetooth technology to communicate with other wireless devices like cell phones and keyboards. It has USB ports for syncing with your computer. You can surf the internet with the device’s WiFi ability and even listen to music while working.

Even the CCTV, the original technology wonder in low vision, has undergone some dramatic enhancements. The myReader (www.humanware.com) is more than just a video magnifier. This technological tool looks like a CCTV and can actually digitize a page of text and then display that text on screen in a variety of formats (i.e. one word at a time, in columns, or in rows). Users can navigate through text while scrolling only in one direction which greatly minimizes the loss of place that patients often experience with traditional CCTVs.

HumanWare also has available the BrailleNote GPS system. This apparatus has the potential to revolutionize Orientation and Mobility instruction for many of our patients with low vision. The device uses a cell-phone sized GPS receiver to relay information from satellites. Patients can calculate the distance and direction to any location. The system can even generate maps and walking route directions.

It is important to note that all of this technology should be used for our patient’s benefit and as a part of our student’s clinical educational experience. In a story on the Illinois Eye Institute’s (IEI) website, customer services associates, Carol and Jay (both of whom have low vision) noted how technology aids them in their daily activities. Carol is responsible for greeting patients arriving for their vision rehabilitation appointments, answers phones, and enters dictation from the IEI staff doctors, as well as preparing patient reports. She uses a program called ZoomText (AF http://www.aisquared.com/) that enlarges whatever is presented on the computer’s screen. It also has speech output capabilities so she can listen to the dictation as she types to ensure accuracy. IEI’s administrative staff relies on Jay to coordinate and maintain the inventory of the IEI’s office supplies and pharmaceutical products. She works as the assistant to the director of materials management while using many of the same technological appliances utilized by Carol. Both of these individuals are excellent examples of how technology should be put to work for our patients.

As we teach our students how to manage patients with visual impairment, it is important to expose them to these exciting new devices (or at least the availability of such devices). None of these technologies are as inexpensive as your grandmother’s magnifier, but they can play an important role in making our patients with visual impairment as technologically efficient and as independent as possible.

Applying Ethical Values in the Clinic

Annelynn Cajayon, O.D.

According to the American Optometric Association Code of Ethics, it is the duty of doctors to keep the visual welfare of the patient uppermost at all times and to see that no person shall lack for visual care, regardless of financial status. It is my personal belief that this statement serves as the foundation of clinical optometry, and it reflects why I chose to pursue this noble profession. Living in Southern California, one cannot help but notice the truly dynamic and diverse community that surrounds us. As optometrists, it is our obligation to serve these populations regardless of ethnic background or financial standing.

During my clinical experiences at the Southern California College of Optometry, I was fortunate to encounter a young Hispanic female who taught me the importance of applying ethical concepts to all my patients. My thirty-year-old patient presented with sudden blurred vision in the left eye, which yielded a best-corrected visual acuity of 20/100. Even though there was a language barrier due to her limited command of English, I could definitely notice a sense of nervousness and urgency in her voice. She informed me of her previous medical history, which included ten years of hypertension and kidney failure with weekly dialysis treatments. As I proceeded to take her blood pressure, I noticed edematous arms that were scarred and tortured from years of dialysis. The measurement revealed an elevated pressure of 180/92. When asked if she was compliant with medications, she replied that occasionally she could not afford to buy them. Apparently, the patient was not aware of the severity of uncontrolled hypertension and claimed that she was never informed of the magnitude of its effects on the body.

Upon dilation, a wedge-shaped hemorrhage was found in the superior quadrant of the left eye, confirming my suspicion of a branch retinal vein occlusion. In addition, the macula was edematous, which is often expected with this diagnosis. Visual fields demonstrated an inferior hemi-field defect consistent with the branch retinal vein occlusion of the superior retina.

As I tried to explain the condition to my patient, her initial reaction was the fear of going blind. I assured her that we would give her the best care possible and that it was important for her to stay calm. I continued to explain to her that she would need to be patient because the condition could take up to three months to resolve. After attempting to explain the condition with my limited Spanish, I immediately requested a translator to repeat my findings and recommendations several times. I felt it was imperative that she completely understand the gravity of her condition, and what was to be expected. I also stressed the need for her to seek immediate attention regarding her high blood pressure.

Realizing that this patient might not return for important follow up care with this potentially sight threatening condition, I tried to convince the clinical staff to make the future visit free of charge. Although compensation for professional services should be rendered, I felt that in this instance, a higher level of moral and ethical decision making must take precedence.

After much insistence, the clinical staff agreed to waive the office visit fees and I was able to inform my patient of the news. She was extremely thankful and requested that I be her clinician at the next appointment. She wanted someone who would listen to her and keep her informed of the progress of her condition. That night, I found myself sleepless, contemplating my patient’s unfortunate situation.

The patient returned three weeks later, and her visual acuity was still 20/100 in the left eye, so we referred her to ophthalmology for an evaluation and a possible fluorescein angiography. Unfortunately, the patient’s insurance was not accepted by our ophthalmologists, which brought about further anxiety and panic. With much coaxing, I convinced the ocular disease secretary to place her on a list of financially challenged patients ensuring that her condition was evaluated and treated.

One would think that this situation is unique, but in reality it is an issue that physicians encounter quite frequently. Managed care is a controversial issue in health care today. Health care organizations often employ a cost effective attitude towards treatment of patients, which frequently impacts the decision making process of physicians in a negative fashion. Often times, patients do not receive the treatment they deserve due to their ethnicity or lack of funds. According to a study led by Harvard researchers, one out of every four adults in the United States has difficulty getting access to and paying for health care. The United States Census states that 32% of people of Hispanic origin are uninsured. Medicaid and other state coverage programs are particularly susceptible to budget cuts, leaving many impoverished ethnic groups at risk for losing their health coverage. Section 125.6 of the California Business and Professions code states that it is unlawful for a licensed person to refuse to provide services because of race, color, sex, religion, ancestry, disability, marital status or national origin. Furthermore, under article 1.5, section 510, practitioners...
are encouraged to advocate for appropriate health care for their patients when payments or services are denied. Therefore, by law we are required to offer our services to all those in need.

However, it is imperative to understand that optometrists need to follow not only legal standards, but unwritten ethical values as well. By solely fulfilling legal regulations, eye care professionals may only be meeting the minimum requirements. For instance, if I had chosen to simply refer the patient to her own managed care organization, she may have been neglected at the health care institution, or become yet another number lost in the paperwork. By exclusively following legal standards, I would have failed to attain a higher level of patient care.

According to the philosopher Immanuel Kant, good will is defined as “the unique human capacity to act according to one’s principles, not out of an expectation of potential consequences.” His universal moral theory was based on the human ability to reason and the belief that all moral actions are the result of virtuous intent. It only follows that this should be applied to optometry as well, since we are in the profession of serving others. The patient’s interest should be placed first and foremost. It is our fiduciary responsibility to recommend the best practitioner for the patient, and to provide advice that is in the patient’s best interest. Our task is to recognize and discipline our selfish motives and replace them with the altruistic principles of compassion and concern for others. It is our moral duty to treat others the way we wish to be treated.

Dr. Richard Hopping [past president, Southern College of Optometry] once eloquently said, “I believe it is important to recognize that the health care professions have an especially heavy burden to bear in the case of ethics. The learned professions are expected to adhere to a higher code of ethics than others.” The actions and values portrayed by the members of a profession speak a thousand words. In today’s multi-cultural environment, optometrists should serve as leaders and do whatever is necessary to promote an ethical culture by displaying acts of accountability, integrity, and virtue.

In addition, it is our duty to communicate with patients in such a way that they thoroughly understand our thought processes and are involved in the decision. Language barriers should never compromise the quality of patient care. It is only by opening the communication lines that patients will trust their doctors, and this is essential regardless of cultural background.

Furthermore, it is also vital to address the fear and anxiety that many patients display when they do not fully comprehend what is happening to them. By imparting a sense of genuine concern and compassion, patients are able to trust that they are being given the best care possible. In turn, by building confidence, the patient is more likely to comply in the treatment the physician recommends.

The personal qualities and values that optometrists display play a significant role in attracting and maintaining patient loyalty. These values are the hallmark of our profession. Dr. Martin Luther King articulated this in his powerful statement, “Every person must decide whether to walk in the creative altruism or the darkness of destructive selfishness. Life’s most persistent and urgent question is, ‘What are you doing for others?’” Ultimately, it is our responsibility as optometrists, and as exemplary individuals, to strive to provide the highest level of health care to all patients by not only fulfilling legal standards, but by adhering to ethical standards of care in every way.

References

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Focus on the President

(Continued from page 9)

David Sullivan, Jr., who was a gifted, generous and confident leader in so many ways.

A universal and timeless virtue is to care about and for others. Each of the institutional leaders in ASCO holds a passion for optometry and a deep devotion to the success of students, alumni, faculty and staff within their respective organizations. It is my wish that each person who contributes to or is affected by optometric education has the opportunity to observe that passion and devotion first hand.

Please tell us more about the College of Optometry at the University of Missouri-St. Louis and what makes it so special.

We are building on the past while embracing the future. Established in 1980, the college is coming of age, turning twenty-five this year. With alumni reaching the peak of their careers serving their local communities, state, regional and national associations and boards, the ripples of that humble start are increasingly apparent throughout the world. UM-St. Louis has consistently offered a rich clinical experience, in breadth and depth, for our graduates. As part of a research university our students also have opportunities to pursue research during or after their formal optometric education. Our faculty recognizes the opportunities offered by new ways of thinking about professional and graduate education. Thus, I am very optimistic about the future of optometry, optometric education and the impact that the University of Missouri will have in the emerging educational model.

Rethinking Attitudes Toward Our Health Care System

Karen Davis, Ph.D.

Excerpted from the June 2005 Commencement Address to the SUNY College of Optometry.

I'm going to talk about the health care system in America, and that's directly relevant to you, but broadly of concern for all of us. Your profession is at heart about improving the quality of life of all people. I think there are four particular challenges that need to be addressed—those that we, as professionals, need to confront head-on.

First, and I think most pressing, how do we deal with the fact that 45 million Americans do not have health insurance? There are deep disparities within our health care system and these are not going to go away until we address this central issue. This is the main defect of American health care, with all its wonders. We have the technology, we even have the money, but nevertheless we still fail to deliver the care that people need.

This simply should not be so. One thing that has motivated me throughout my career is the simple conviction that people who need health care should be able to get it, because I really do believe in modern medicine's ability to help people live longer lives, better lives.

Next on my list of challenges is the issue of diversity. Today about a quarter of the population are what we call "minorities." By the time most of you hit the prime of your professional lives, that number will be approaching 40 percent. Our health system today is unprepared for this, as we continue to record significant disparities in health outcomes for minority Americans. How do we prepare the health system to be responsive to the needs of a diverse nation? How do we make our system more culturally competent? These are crucial questions.

Third, we need to pay a lot more attention to the aging of the population. The "graying of America" is a hot topic in the news, but the implications for our health system have not been fully appreciated. How are we going to deal with the long-term care needs of our aging society? How are we going to pay? What, for instance, are we to do about the quality of care in nursing homes?

Again, we have the wherewithal, the knowledge and funds, to improve care for the elderly, for all people. What we apparently lack is the will. We need to help our nation discover that will.

Last, moving into the 21st century, I believe we need to fundamentally rethink our whole attitude toward the health care system and what we demand of it and its professionals—of ourselves. From top to bottom, we need to work to make it a more patient-responsive system. Now what does that mean, patient-responsive? Well, it means a system that is driven by the needs of the patient, rather than by insurance companies, hospitals, doctors—a system that provides the kind of care that patients want and need when they want it in a way that works for them.

All these issues—lack of access, diversity, the aging population and patient-centered care—are of utmost importance not only to the traditional health care fields but also to the values that this college enshrines.

So these are demanding challenges that I've laid out, but there are practical ways to pursue them. There are opportunities in the health sector to improve the quality of care, to make it more responsive to patients, and to improve its accessibility to low-income and minority Americans.

There are opportunities in public service—at the local, state and national level. One of the things of which I am most proud is the expansion of Medicaid to an additional 10 million low-income children and pregnant women in the 1980s and early 1990s—a proposal I first put forward as deputy assistant secretary for health policy under President Carter. When an opportunity for public service comes along, there is a tremendous capacity to affect the lives of millions.

There are also opportunities in the nonprofit sector—from advocacy organizations working to improve conditions for those most vulnerable to philanthropic organizations.

Achieving the goals I've outlined today won't be an easy task. It will take a wholehearted commitment to excellence to do so. It will take courage to speak out and make your views known. Saying what needs to be said is a responsibility we all have. We simply cannot continue with a health system that excludes some of our people because of race or ethnicity or income. Nor can we continue to be blind to shortcomings in our system. Rather, we need to harness all the resources at our command—including this graduating class—to improve the performance and responsiveness of the health system to the needs of all Americans. And that's your job—dedicate your mind, your ideas, your skills, your abilities, your time and your life in a way that will be of consequence to our society and to humanity.

Dr. Davis is president of The Commonwealth Fund, a private foundation that supports independent research on health and social issues.