HOW WELL IS THE MICHIGAN COLLEGE OF OPTOMETRY EDUCATING ITS PATIENTS?

by

Breyne Louise Middleton

This paper is submitted in partial fulfillment of the requirements for the degree of

Doctor of Optometry

Ferris State University
Michigan College of Optometry

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Has been approved

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APPROVED:

Faculty Advisor

Ferris State University
Doctor of Optometry Paper
Library Approval and Release

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I, Breyne Louise Middleton, hereby release this paper as described above to Ferris State University with the understanding that it will be accessible to the general public. This release is required under the provisions of the Federal Privacy Act.

April 2, 2008
Date

ABSTRACT

Background: Optometry schools are lagging behind medical schools in teaching their graduates how to communicate with patients, even though this is one of the most important areas of an eye exam. Optometry students have indicated that they believe they would benefit from more focused communication training, but no studies have looked at the situation from the patient's point of view. *Methods*: A satisfaction survey was sent out to 328 patients who have had either a full primary care eye exam or a full contact lens eye exam at the Michigan College of Optometry's University Eye Center within the last year. *Results:* Eighty-seven surveys were returned. The majority of patients indicated they were satisfied or somewhat satisfied with the discussions concerning their ocular and visual health status, treatment options and recommendations for vision and eye health, follow-up visits, and recommendation for re-examination. *Conclusions*: While the majority of patients at the University Eye Center were satisfied or somewhat satisfied with the discussions they had with the optometrist or student intern, room for improvement does exist, especially when discussing the availability of different treatment options and the risks and benefits of each.

TABLE OF CONTENTS

LIST OF TABLES

Table Page

INTRODUCTION

Patient education is one of the most important aspects of the medical professions. Traditionally, there were no specific courses to teach communication to medical students.[1] Communication, when learned only by empirical methods, can often lead to inadequate results.[2,3] Over recent years, communication training in medical schools has received increased attention.[1,2,4] It has been established that it is possible to teach communication skills by documentable, standardized classroom methods.[1-5] Another approach is to use theater workshops and videotaped mock patient encounters.[2,6-8] The Association of American Medical Colleges recognizes in its most recent guidelines that before graduation, students must learn to "communicate effectively" with patients and their families.[9] Medical school accreditation bodies also acknowledge the importance of teaching communication skills. The Liaison Committee on Medical Education states in their standards that in order for a school to receive accreditation "There must be specific instruction in communication skills as they relate to physician responsibilities..." and these skills must be evaluated by direct observation of the faculty.[10] Medical residency programs also must include communication in their curricula in order to be accredited.[1] Research indicates that the earlier such communication training occurs in the education process, the more effective it is.[3,11]

Medical schools are not the only establishments involved in training young doctors. In its standards, the Commission on Dental Accreditation mentions that graduates must have communication skills, but it does not say how they should obtain such skills.[12] Recommendations have been made for dental schools to include communication training courses specific to communication.[13] A few dental schools have started to follow the lead of medical schools and include communication workshops where students are evaluated on their interactions with mock patients.[14] At this time, five of the 55 dental schools in the United States and Puerto Rico evaluate their students on their communication skills.[13]

Similar to dental schools, in order to receive accreditation, optometry schools must graduate students who can communicate with and educate their patients. However, the Accreditation Council on Optometric Education does not explicitly state that there must be courses or training in communication.[15] The Illinois College of Optometry (ICO) reported in 2005 that 2.8% of its didactic training was focused on communication.[16] Pacific University College of Optometry (PUCO) and Southern College of Optometry (SCCO) each have a course involving video-taping students in mock-patient situations.[17,18] A few other optometry schools, including the Michigan College of Optometry (MCO), have classes that include patient communication in their course descriptions.[19] However, most colleges expect that students pick up their communication skills from observation and experience in clinical situations, especially during their final year of school.[16,20,21]

Are optometry schools doing a good enough job educating their students on this critical aspect of medical care? A few studies have focused on how the students feel they are

prepared, and most find students lack confidence in their communication skills.[16,20,21] One survey administered at ICO found that students felt more prepared to communicate with patients during the fourth quarter of their third professional year than during the first quarter. Students who reported that they did not feel ready to properly educate their patients suggested spending more classroom and role playing time would have helped them.[16] Another study at ICO, following an interventional communications course, suggested that building students' confidence early on and including communications training through all four professional years would be the most productive approach.[21]

Other researchers have tried to objectively asses how well students are prepared. A study performed at the SCCO found that following a communications course students were better able to communicate as well as discriminate empathy on a written test than they had before the course.[22] This study suggested that students should next be observed and graded on their interactions with actual patients. However, studies have yet to focus on how the patients feel when they are communicating with student interns. Do patients' experiences with student interns in optometry school clinics meet their needs and expectations?

The current study was conducted in conjunction with the University Eye Center at MCO. MCO states on its website that patient education should include:

- "Review of the patient's visual and ocular health status in relation to his/her visual symptoms and complaints
- Explanation of available treatment options including risks and benefits
- Recommendation of a course of treatment with the reasons for its selection and the prognosis
- Discussion of need for any follow-up care and ongoing patient compliance of the treatment prescribed
- Recommendation for re-examination"[23]

Patients seen recently at the eye clinic at the Michigan College of Optometry were asked how satisfied they were with the communication they received in each of the above areas.

METHODS

In September 2007, an 18 question survey was mailed to patients who had been seen at the University Eye Center within the past 12 months. The surveys were sent to 324 patients who had received a comprehensive contact lens examination or primary care examination. Patients were asked about their level of satisfaction with the discussions they had during their comprehensive examination with either the optometrist or the optometry student. All responses remained anonymous. The Human Subjects Review Committee at Ferris State University approved this study. The application can be found in Appendix A. The survey can be found in Appendix B. Respondents were given the option of "not applicable" on all questions. Responses were analyzed only by the number of patients who indicated they found the question to be relevant.

RESULTS

A total of 87 responses to the surveys were received, giving a 26.9% response rate. Complete responses were received from 47 contact lens patients (54.0% of responses) and 40 primary care patients (46.0% of responses). The ages of the respondents included 17 between 18-30 (19.5%), 37 between 31-50 (42.5%), 28 between 51-70 (32.2%), and five over the age of 70 (7.1%). Responses were received from 21 males (24.1%) and 66 females (75.9%). Results were not analyzed based on gender due to the great disparity in the number of responses between males and females.

A full listing of responses by percentage can be seen in Table 1.

Table 1: Responses by Percentage

Patients were asked to indicate how satisfied they were with the discussion they had with the optometrist and/or optometry student regarding the following topics:

	Satisfied	Somewhat Satisfied	Neutral/ No Opinion	Somewhat Dissatisfied	Dissatisfied
Vision and eye health in general	88.5%	69.0%	2.3%	0.0%	2.3%
Concerns or questions about vision or eye health	83.7%	10.5%	3.5%	2.3%	0.0%
The availability of different treatment options to correct vision	68.8%	12.5%	16.3%	2.5%	0.0%
>The risks and benefits of above	65.3%	15.3%	18.1%	1.4%	0.0%
>Why a particular treatment option is best	67.1%	15.1%	16.4%	1.4%	0.0%
The availability of different treatment options for eye health problems	61.5%	10.8%	23.1%	3.1%	1.5%
>The risks and benefits of above	65.2%	13.6%	18.2%	1.5%	1.5%
>Why a particular treatment option is best	68.3%	12.7%	17.5%	0.0%	1.6%
Reason for follow-up visits	75.0%	10.9%	12.5%	0.0%	1.6%
The patient's part in maintaining good visual and ocular health	80.7%	13.3%	6.0%	0.0%	0.0%
The importance of maintaining regular care with and eye doctor	84.7%	8.2%	7.1%	0.0%	0.0%

Patients indicated they were most satisfied with the discussion they had with the optometrist and student intern regarding their vision and eye health in general (95.4% satisfied or somewhat satisfied, 2.3% somewhat dissatisfied or dissatisfied), the discussion they had regarding any concerns or questions they had about their vision or

eye health (94.2% satisfied or somewhat satisfied, 2.3% somewhat dissatisfied or dissatisfied), the discussion they had regarding their part in maintaining good visual and ocular health (94.0% satisfied or somewhat satisfied, 0% somewhat dissatisfied or dissatisfied), and the discussion they had regarding the importance of maintaining regular care with an eye doctor (92.9% satisfied or somewhat satisfied, 2.3% somewhat dissatisfied or dissatisfied).

Patients indicated they were the least satisfied with the discussion they had with the optometrist and student intern regarding the availability of different treatment options for eye health problems (72.3% satisfied or somewhat satisfied, 4.6% somewhat dissatisfied or dissatisfied). This question had the smallest percentage of satisfied and somewhat satisfied responses as well as the most somewhat dissatisfied and dissatisfied responses. Question 4a, regarding the discussion the patient had regarding the risks and benefits of available treatment options for eye health problems had the second smallest percentage of satisfied and somewhat satisfied responses and the second highest somewhat dissatisfied and dissatisfied responses (78.8% satisfied or somewhat satisfied, 4.6% somewhat dissatisfied or dissatisfied).

Only two respondents reported having LASIK eye surgery. These were both primary care patients. Only one patient reported they were wearing Corneal Reshaping contact lenses.

A final question asked, "Are you interested in Corneal Reshaping of LASIK eye surgery?" Interest was indicated by 31.9% of contact lens patients and 20.0% of primary care patients. Although this was presented as a yes or no question, write-in answers for this question were received from nine patients.

Comments written on surveys are listed in Table 2.

DISCUSSION

Patient education is one of the most important facets of the medical professions. Medical schools have begun to recognize the fact that students need more than just trial and error to learn this particular skill and even include it in their accreditation standards. Dental schools and optometry schools are starting to follow suit, but have yet to update their standards.

While students may feel they are unprepared to communicate with their patients, it is also important to consider how patients feel.[21,22] However, no study can be analyzed without first discussion potential limitations. One obvious limitation in the study is the limited sample size. Only 87 surveys were returned for analysis. This limits the extent to which the results can be generalized. Most surveys were also from women and from people aged 31-50, again limiting how the results can be seen to represent the patient population at MCO.

Table 2: Written Comments on Surveys	
Vision and eye health in general	--
Concerns or questions about vision and eye health	--
Availability of different treatment options to correct vision	"not really discussed but not asked for either" "no discussion" "was not brought up by you or me"
>Risks and benefits of above	"no discussion" "was not brought up by you or me"
>Why a particular treatment option is best	"no discussion"
Availability of different treatment options for eye health problems	"no discussion"
>Risks and benefits of above	--
>Why a particular treatment option is best	"no discussion"
Reason for follow-up visits	--
The patient's part in maintaining good visual and ocular health	"need to wear sunglasses"
The importance of maintaining regular care with an eye doctor	"I keep up with eye exams every 2 yrs so doctor found no need to discuss frequency of apptmts"
Are you wearing Corneal Reshaping contact lenses, which correct your eyes for nearsightedness?	"No, not that I know of!" "? I wear bifocal lenses"
Are you interested in Corneal Reshaping or LASIK eye surgery?	"Maybe" "I don't know yet!" "Don't know enough to decide" "Maybe" "Interested in knowing about it!" "?" "for husband and daughter" "I don't know what it entails but probably not" "Yes, but I don't have insurance or the money to pay for it"
Further comments	"Very unhappy customer, I'll NEVER return" "Note: Dr. Pole is super!" "I think you have excellent facilities and a great idea it is to get the student interns involved with patients early on." "I have been getting a check-up and glasses for 20 years @ the clinic - no other discussions occur. Should they?"

A further limitation is the patient population itself. Most patients seen at the University Eye Center are Caucasians of the lower and middle socioeconomic classes or students at Ferris State University. The results of this survey cannot be extended to other areas or patient populations, even at other optometry schools.

It has been reported that patients who are more satisfied are less likely to return surveys.[24] This would seem to indicate that the satisfaction level would be underestimated, however, it has also been shown that patients with more serious eye conditions have higher expectations at their eye examinations that healthy patients.[25]

Since the diseased eye population at MCO is not high, the surveys were more likely to reach healthy, and therefore more satisfied, patients.

With this in mind, this study does indicate that patients are mostly satisfied with their experience at the University Eye Center. Only two questions received satisfied or somewhat satisfied ratings below 80%. The highest somewhat dissatisfied or dissatisfied rating was 4.6%.

The results indicate that the University Eye Center could strive to do a better job at fulfilling its second stated goal for patient education, "Explanation of available treatment options including risks and benefits," especially when it comes to eye health issues.[23]

Written comments also seem to indicate that there is room for improvement in educating patients about treatment options to correct their vision as well. While this set of questions (3-3b) 80.6% satisfied or somewhat satisfied ratings and 2.5% or less somewhat dissatisfied or dissatisfied ratings, many patients indicated that they were uncertain about vision-correcting treatment options. Some did not know whether or not they were wearing corneal reshaping contact lenses. Others noted they would like to know more about LASIK and corneal reshaping. One patient even confessed that they had never had a conversation with their optometrist or student intern that ventured outside the general topic of their vision and the importance of maintaining regular care. Another patient agreed that no discussion had occurred outside the realm of general vision and eye health.

The importance of communication between doctors and their patients cannot be underestimated. Schools that train doctors of any type should be continually striving to produce new graduates who can confidently communicate with and educate their patients on important aspects of their health. Optometrists are no exception. Given the wide variety of potentially blinding conditions and the assortment of treatment options for something as simple as refractive error, optometrists need to be particularly good at informing their patients of all their options in order for them to be both satisfied and well-educated.

Perhaps the best way to graduate more communicative optometrists is to include a course specifically designed to train these skills early in optometry school.[2,3,16,20,21] This would first build the students' confidence and from there regular instruction and feedback throughout the rest of their education would build upon and expand the skills which had been impressed early. Student would graduate being ready to communicate at a higher level, likely creating more satisfied patients. Specific training courses regarding communication could increase patient satisfaction when interacting with student interns in optometry schools as well as with optometrists after they graduate.

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APPENDIX A

APPLICATION FOR APPROVAL OF A PROJECT INVOLVING HUMAN SUBJECTS

APPLICATION FOR APPROVAL OF A PROJECT INVOLVING HUMAN SUBJECTS
INITIAL REVIEW (and 5 yr. renewal)
HSRC

Dr. Connie Meinholdt, Chair
College of Arts & Sciences - ASC-2108
Ferris State University
Big Rapids, MI 49307
Phone: 231-591-2759
e-mail: connie_meinholdt@ferris.edu

DIRECTIONS: Please complete the questions on this application using the instructions and definitions found on the attached sheets.

1. Responsible Project Investigator:
(Faculty or staff supervisor)
Name: **Roger Kamen, O.D., M.S.**
Social Security Number: _____

Department: Optometry
College: Optometry

I accept responsibility for conducting the proposed research in accordance with the protections of human subjects as specified by HSRC, including the supervision of faculty and student co-investigators.
Signature: _____

Additional Investigator(s):

Name: **Breyne Middleton**
SS# or Student ID#: _____

Name: _____
SS# or Student ID#: _____

Name: _____
SS# or Student ID#: _____

Name: _____
SS# or Student ID#: _____

2. Address: If there are more than two investigators, please indicate who should receive correspondence, and provide further addresses on a separate page.

Responsible Project Investigator
Roger Kamen
1310 Cramer Circle
Big Rapids, MI 49307
Phone # : 231-591-2189
Fax #: _____
Email: kamenr@ferris.edu

Additional Investigator(s)
Breyne Middleton
1609 Manitou Lane
Middleville, MI 49333
Phone #: **734-945-9302**
Fax #: _____
Email: **midd12@fsuimail.ferris.edu**

3. Title of Project: **A Survey of Patient Satisfaction with Their Educational Experience at the Michigan College of Optometry**

FOR OFFICE USE ONLY	
Subcommittee _____	Agenda _____

4. Funding (if any) **None**
FSU Contracts and Grants app. # _____ if applicable

5. Has this protocol been submitted to the FDA or are there plans to submit it to the FDA? **No [x]** Yes [ ]
If yes, is there an IND #? No [ ] Yes [ ] IND # _____

6. Does this project involve the use of Materials of Human Origin (e.g., human blood or tissue)?
No [x] Yes [ ]

7. When would you prefer to begin data collection? **August 2007**
Please remember you may not begin data collection without HSRC approval.

8. Category (Circle a, b, or c below and specify category for a and b.

(a.) This proposal is submitted as EXEMPT from full review.
Specify category or categories: **1-C**

b. This proposal is submitted for EXPEDITED review.
Specify category or categories: _____

c. This proposal is submitted for FULL sub-committee review.

9. Is this a Public Health Service funded, full review, multi-site project?
No [x] Yes [ ]
If yes, do the other sites have a Multiple Project Assurance IRB that will also review this project?
[ ] No. Please contact the HSRC office for further information about meeting the PHS/NIH/OPRR regulations.
[ ] Yes. Please supply a copy of that approval letter when obtained.

10. Project Description (Abstract): Please limit your response to 200 words.

The purpose of this project is to determine if patients at the Michigan College of Optometry are being educated to their full satisfaction regarding their ocular and visual health, treatment options, and need for follow-up care. This information valuable information that could be useful to the Michigan College of Optometry when training new interns.

11. Procedures: Please describe all project activities to be used in collecting data from human subjects. This also includes procedures for collecting materials of human origin and analysis of existing data originally collected from human subjects

All data for this study will be collected by surveying patients of the Michigan College of Optometry who have had complete eye exams in the last year. Only patients over the age of 18 will be selected. These patients will be contacted via the United States Postal Service. Addresses will be obtained from the Michigan College of Optometry. The surveys will be collected and reviewed. The data will be put into groupings to see common trends. Conclusions will be drawn from the data about the opinions of patients regarding their educational experience at their exam at the Michigan College of Optometry.

12. Subject Population: Describe your subject population. (e.g., high school athletes, women over 50 w/breast cancer, small business owners)

Patients at the Michigan College of Optometry over the age of 18 who received a full eye exam within the last year.

a. The study population may include (check each category where subjects **may be included by design or incidentally**):

Minors	[ ]
Pregnant Women	**[x]**
Women of Childbearing Age	**[x]**
Institutionalized Persons	[ ]
Students	**[x]**
Low Income Persons	**[x]**
Minorities	**[x]**
Incompetent Persons (or those with diminished capacity)	[ ]

b. Number of subjects (including controls) **approximately 250**

c. How will the subjects be recruited? (Attach appropriate number of copies of recruiting advertisement, if any.

Subjects will be recruited from the recall system at the Michigan College of Optometry clinic

d. If you are associated with the subjects (e.g., they are your students, employees, patients), please explain the nature of the association.
Subjects are patients at the Michigan College of Optometry, where I currently attend.

e. If someone will receive payment for recruiting the subjects please explain the amount of payment, who pays it and who receives it.

No monetary incentives involved.

f. Will the research subjects be compensated? **[x] No** [ ] Yes.
If yes, details concerning payment, including the amount and schedule of payments, must be explained in the informed consent.

g. Will the subjects incur additional financial costs as a result of their participation in this study? **[x] No** [ ] Yes. If yes, please include an explanation in the informed consent.

h. Will this research be conducted with subjects who reside in another country or live in a cultural context different from mainstream US society? **[x] No** [ ] Yes.

(1) If yes, will there be any corresponding complications in your ability to minimize risks to subjects, maintain their confidentiality and/or assure their right to voluntary informed consent as individuals? [ ] No [ ] Yes.

(2) If your answer to h-1 is yes, what are these complications and how will you resolve them?

13. How will the subjects' privacy be protected?

No names will be used on the survey, and all surveys will be returned in pre-addressed stamped envelopes. No indication of their origin will be on the envelopes.

14. Risks and Benefits for subjects:

There are no foreseen risks with these surveys. Benefits to patients may include better education at their next visit to the Michigan College of Optometry.

15. Consent Procedures

A patient's consent will be understood if the survey is returned to the study investigator. Completion of the survey is up to the patient's own discretion.

APPENDIX B

SURVEY

MICHIGAN COLLEGE OF OPTOMETRY

PATIENT EDUCATION SATISFACTION SURVEY

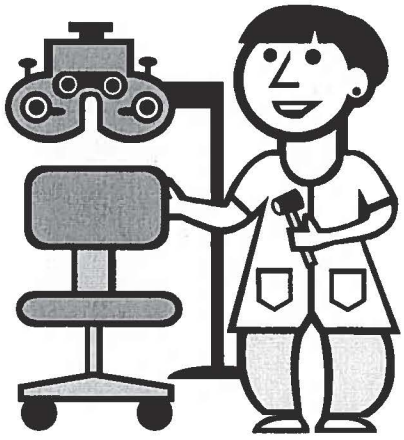
You are being asked to participate in a study to collect data regarding patient satisfaction with recent eye examination at the Michigan College of Optometry. The results will provide a better understanding of patients' needs and expectations at their eye examinations.

This survey will take approximately five minutes to complete.

Completing and returning this survey indicates your voluntary agreement to participate in the study.

No identifying information will be collected.

Please return in the pre-addressed, postage paid envelope provided by ***November 10, 2007****.*



Thank you for your participation.

Survey results will be available 5-1-08
Contact:
Breyne Middleton
Email: midd12@fsuimail.ferris.edu

Questions or concerns?
Contact: Dr. Connie Meinholdt
Human Subjects Research Committee
Email: ConnieMeinholdt@ferris.edu
Tel: 231-591-2759

You recently received a comprehensive eye examination at the Michigan College of Optometry in Big Rapids, Michigan. Please answer the following questions regarding your visit.

Please check the box that most accurately describes **how satisfied you were with the discussion you had with your optometrist and/or optometry student intern** about the following topics.

	Satisfied	Somewhat Satisfied	Neutral/ No Opinion	Somewhat Dissatisfied	Dissatisfied	Not Applicable
1) Your vision and eye health in general	☐	☐	☐	☐	☐	☐
2) Concerns or questions you had regarding	☐	☐	☐	☐	☐	☐
3) The availability of different treatment options to correct your vision (including eyeglasses, contact lenses, LASIK, corneal reshaping therapy)	☐	☐	☐	☐	☐	☐
3a) The risks and benefits of the above	☐	☐	☐	☐	☐	☐
3b) Why a particular treatment option is	☐	☐	☐	☐	☐	☐
4) The availability of different treatment options for eye health problems (including eye drops, medications, , if any	☐	☐	☐	☐	☐	☐
4a) The risks and benefits of the above	☐	☐	☐	☐	☐	☐
4b) Why a particular treatment option is	☐	☐	☐	☐	☐	☐
5) Reason for any follow-up visits, if any	☐	☐	☐	☐	☐	☐
6) Your part in maintaining good visual and	☐	☐	☐	☐	☐	☐
7) The importance of maintaining regular care with an eye doctor	☐	☐	☐	☐	☐	☐

Your age:
☐ 18-30
☐ 31-50
☐ 51-70
☐ Over 70

Your gender:
□ Male
□ Female

Do you wear contact lenses?
□ Yes
□ No

Do you wear glasses/spectacle?
□ Yes
□ No

Have you had LASIK eye surgery to correct your eyes for farsightedness and/or nearsightedness?
□ Yes
□ No

Are you wearing Corneal Reshaping contact lenses, which correct your eyes for nearsightedness?
□ Yes
□ No

Are you interested in Corneal Reshaping or LASIK eye surgery?
□ Yes
□ No

Thank you for your time!

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This paper is submitted in partial fulfillment of the requirements for the degree of

Doctor of Optometry

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May, 2008