

A SURVEY ON THE UTILIZATION
OF
OPTOMETRIC CARE

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ABSTRACT:

Many studies on health service utilization have been completed in the past however, very few if any have dealt with the optometric profession itself. This article will discuss optometric seeking behavior found in one study using a survey questionnaire completed by 120 patients. A combination of health utilization models were employed to help determine the type of individuals who sought optometric care in order to enable health professionals to better evaluate optometric service usage.

KEY WORDS; medical sociology, demographics, statistics

INTRODUCTION:

Medical sociology has been accepted as a definitive field to research only since the 1950s. McIntire describes medical sociology as " the science of the social phenomena of the physicians themselves as a class apart and separate; and the science which investigates the laws regulating the relations between the medical profession and human society as a whole; treating of the structure of both, how the present conditions came about, what progress civilization has effected and indeed everything relating to the subject."¹

Although medical sociology is a relatively recent field, much valuable research has been obtained already. Most of these studies have been in medicine. For example, here are a few areas that have been researched: 1. health care organizational structure 2. role relationships 3. value systems 4. rituals and functions of medicine as a system of behavior 5. social epidemiology 6. teaching of medical students. The Optometric field, however, has not been researched to our knowledge. That is why we chose to study this area.

The emphasis on our study is from the health service utilization model. This study encompasses two main areas. The first is concerned with the sociodemographic variables such as race, age, economic status, education etc., while the second area deals with the social psychological variables. This includes the individuals' attitudes, beliefs and perceptions towards the medical community and their own health.

There are five reasons one should study this area: 1.) to illustrate the interrelationships among the determinants of health service utilization 2.) to facilitate the prediction of future health service needs 3.) to determine whether or not the distribution of the use of health services is equitable 4.) to suggest ways to manipulate policy relevant variables in order to bring about desired changes and 5.) to evaluate the impact of new health care delivery programs or projects.²

METHOD:

A questionnaire was completed by 120 patients over a period of two months at the Ferris State University Optometry Clinic prior to their exam. Both new and return patients were surveyed in the primary care clinic. This clinic ranges in age from 12 and older. It does not include contact lens wearers, low vision patients or chronic pathology patients. It does include patients who have unpreviously diagnosed pathology or have binocular problems.

After the data was collected each answer was coded and these codes were entered onto a Univariate statistical computer program. This was then processed to reveal the desired calculations.

NEW PATIENT QUESTIONNAIRE

We would like to know something about you to help us understand who uses our services.

1. What is your age? _____
 2. Are you: _____ Male _____ Female
 3. What is your race?
_____ White _____ Oriental
_____ Black _____ Hispanic
_____ American Indian _____ Other
 4. What is the highest level that you completed in school?
_____ 0-8th grade
_____ 9-11th grade
_____ completed high school
_____ technical school
_____ some college
_____ graduated with a two year college degree
_____ graduated with a four year college degree
_____ some post graduate college
_____ completed graduate school education
 5. What is your total family income?
_____ 0-10,000 _____ 41,000 - 50,000
_____ 11,000 - 20,000 _____ 51,000 - 60,000
_____ 21,000 - 30,000 _____ 61,000 - 70,000
_____ 31,000 - 40,000 _____ 71,000 and up
 6. How many females are in your household? _____
 7. Do they have any eye problems? _____ yes _____ no
 8. Have they ever seen an eye doctor? _____ yes _____ no
 9. How many males are in your household? _____
 10. Do they have any eye problems? _____ yes _____ no
 11. Have they ever seen an eye doctor? _____ yes _____ no
- Now we would like to know something about your eye history.
12. Have you ever gone to an eye doctor before?
_____ yes _____ no
 13. Have you ever had an eye problem in the past?
_____ yes _____ no
 14. Has anyone in your family ever had any eye problems?
_____ yes _____ no _____ unsure

RESULTS:

Upon compiling the statistical data, it was found that the ages ranged from 12-73 years old with the average age 32.8 years. The median was 25.0 years while the mode was 18 years. The following tables reveals the other results.

Table 1	freq	marg%
2. GENDER		
female	71	59.2
male	49	40.8
3. RACE		
White	113	94.2
Black	3	2.5
American Indian	1	.8
Oriental	1	.8
Hispanic	2	1.7
4. EDUCATION		
0-8th grade	5	4.2
9-11th grade	14	11.7
High School graduate	36	30.0
Technical School	1	.8
Some college	34	28.3
2 year degree	14	11.7
4 year degree	3	2.5
some graduate school	7	5.8
graduate school degree	5	4.2
5. INCOME		
0-10K	19	15.8
11-20K	25	20.8
21-30K	23	19.2
31-40K	20	16.7
41-50K	8	6.7
51-60K	3	2.5
61-70K	2	1.7
71K plus	4	3.3
6. FEMALES IN THE HOUSEHOLD		
0	5	4.2
1	43	35.8
2	45	37.5
3	23	19.2
4	4	3.3
7. FEMALES IN THE HOUSEHOLD WITH EYE PROBLEMS		
Yes	72	60
NO	45	37.5
8. FEMALES IN THE HOUSEHOLD WHO HAVE SEEN AN EYE DR.		
Yes	104	86.7
NO	13	10.8
9. MALES IN THE HOUSEHOLD		
0	13	10.8
1	47	39.2
2	30	25.0
3	19	15.8
4	8	6.7
6	1	.8
9	2	1.7
10. MALES IN THE HOUSEHOLD WITH EYE PROBLEMS		
Yes	71	59.2
No	42	35.0

11. MALES IN THE HOUSEHOLD WHO HAVE SEEN AN EYE DR.		
Yes	96	80.0
No	15	12.5
12. HAVE YOU SEEN AN EYE DR. BEFORE		
Yes	107	89.2
No	12	10.0
13. HAVE YOU HAD PAST EYE PROBLEMS		
Yes	73	60.8
No	45	37.5
14. DO YOU HAVE EYE PROBLEMS IN THE FAMILY		
Yes	95	79.2
No	16	13.3
15. YOUR PAST EYE PROBLEMS		
Disease	1	.8
Headaches	8	6.7
Blur	15	12.5
Eye turn	1	.8
Other	16	13.3
Multiple problems	29	24.2
16. RELATIVES WITH EYE PROBLEMS		
Dad	5	4.2
Mom	5	4.2
Both parents	6	5.0
Grandmother	1	.8
Grandfather	0	.0
Aunt	0	.0
Uncle	1	.8
Child	3	2.5
Brother or Sister	1	.8
Mom and Relatives	14	11.7
Dad and Relatives	12	10.0
Both Parents and Relatives	41	34.2
Other Relatives, Not Parents	3	2.5
17. SERIOUSNESS OF RELATIVES' EYE PROBLEMS		
Definitely		
1	10	8.3
2	8	6.7
Somewhat		
3	26	21.7
4	18	15.0
Not at all		
5	34	28.3
18. DO EYE PROBLEMS RUN IN THE FAMILY		
Definitely		
1	11	9.2
2	5	4.2
Somewhat		
3	44	36.7
4	20	16.7
Not at all		
5	21	17.5
19. WHY DID YOU SEEK TREATMENT		
I think there is a visual problem	59	49.2
I have no complaints	36	30.0
Someone else thinks I have a vision problem	11	9.2
20. HOW LONG HAVE YOU HAD A VISION COMPLAINT		
Few days	1	.8
Few weeks	15	12.5

Few month	31	25.8
One year	9	7.5
More than a year	10	8.3
Always had this problem	9	7.5
No complaints	22	18.3
21.WHY CHOOSE FERRIS?		
Friend	18	15.0
Media	2	1.7
Relative	32	26.7
Other	51	42.5
22.SERIOUSNESS OF YOUR OWN EYE PROBLEM		
Very		
1	1	.8
2	5	4.2
Somewhat		
3	21	17.5
4	26	21.7
Not at all		
5	51	42.5
23.FEAR THAT YOU MAY DEVELOP SERIOUS EYE PROBLEMS		
Very		
1	1	.8
2	5	4.2
Somewhat		
3	16	13.3
4	36	30.0
Not at all		
5	50	41.7

DISCUSSION:

This study shows that women tend to seek optometric care slightly more often than men with a ratio of 7:5. This may be because women have more knowledge about health care than men. Other medical studies such as Andersen and Anderson have also shown that utilization of physicians was slightly higher for females than males even after corrections were made for maternity on a ratio of 5.6:4.3 visits.³ A dental study by the same investigators also found slightly higher female use than males 51%to48%.⁴

Although this study did not show elderly using optometric services more, it has been found in other research. This may be due to the limited population that was seen on the campus clinic. The other research done in health service utilization found not only do elders have increased risk for health problems, but often visit physicians more often since they are either disabled or have public insurance(Medicare/Medicaid).⁵

Racial differences in optometric seeking of care was difficult to indicate in this study due to the lack of variety in the on campus clinic site. Out of the patients seen, 94.2% were white while 2.5% black. Other studies have indicated that lower income blacks and Mexican-Americans tend to lack confidence in health professionals and seek out nonprofessionals at first such as a relative or friend to begin treatment.⁶ They also tend not to go for prevenative care which seems to be a white middle income concept. However, when other races reach middle income levels such as blacks and Mexican -American, they appear to develop the Anglo ideas of prevenative care.⁷

The most prevalent income level was 11,000-20,000 at 20.8%. Coming in a close second was 21,000-30,000 with 19.2% of the patients. This showed the Ferris Clinic mainly served lower middle class individuals which would somewhat be expected since many were attending college.

This lower income also correlated with the lower education.

One third of the patients had only graduated from high school, while 28.3% had some college education. It may be taken note that 19 individuals examined at the clinic had not finished high school, however, 14 of these patients were still completing it.

It was interesting to note that 60% of the household females had eye problems, while 59% of the household males did also. In previous research on physician utilization, it was found that households with more females used the doctor's services at a larger percentage. In this study this data was not shown. Both types of households used optometric care at about the same percentage.

Surprisingly 20-30% of the patients were being seen on a prevenative care basis since 86.7% of the females and 80% of the males had seen an eye doctor, yet only 60% of these had eye problems. This was also substantiated by the finding that 37% did not have any visual complaints but still were coming for an exam. This also shows that females tend to seek optometric care slightly more than males even for prevenative care.

Nearly two-thirds of the patients revealed that they had eye problems which correlated with the ocular problems found in the male and female relatives who lived with them. In combining of the family eye problems 79.2% said that their family had eye problems while 13.3% said there were none. Trying to break down family relatives into maternal and paternal statistics revealed no difference associated with occurrence of ocular problems.

When the general term of eye problem was finally addressed, 35.8% did not respond to the question. This accounted for the few who sought prevenative care (30%) and a small percentage of those who did not fill out the second page of questions at all.

Only 12.5% said they had blurred vision. Realizing that one fifth to one third of the public requires glasses or contacts to see well, this percentage seems rather low. Yet, 13.3% had other eye problems not listed. Obviously, there was some discrepancy on the terminology of "eye problems". Thus, possibly more public awareness is needed or simply that the category of their problem was not there.

Surprisingly 28% of the patients were not concerned at all with the eye problems of their relatives, while 21% were only somewhat concerned. Still, 42% were not at all concerned about their own eye problem and 21% thought the ocular symptoms may be somewhat serious. A mere 17% believed it was somewhat more serious. This finding may be due to the small percentage of individuals actually who do have serious ocular problems. Approximately 500,000 Americans are legally blind, however 50% of these are over age 65 and continue to be over half of the new cases. Even so, 14 million Americans are considered visually impaired such that they cannot obtain an unrestricted drivers license or need special optical magnifiers for reading purposes. With this many people having more severe visual problems, it still only comprises 6% of the total population.⁸ Other data has revealed that nearly one third or 79.5 million people in the U.S. have a disease in one or both eyes.⁹ However, the diseases

themselves were not defined. Since some of these ocular diseases may not be visially threatening, it would be understandable why people have less fear of ocular complaints themselves and/or of their relatives.

Even when 79.2% of the patients had admitted they had eye problems in the family, only 30% were somewhat afraid that they may have serious problems in the future. Still 41% weren't at all afraid. This relates again to the two factors previously mentioned. The first is that the public is unaware of what ocular problems may occur. Many think glasses will cure it all. The second factor is that only a moderate to small percentage of the population has serious eye conditions and still may or may not be educated enough to explain their problem to the family.

However as it was noted earlier more people(30%) are coming in for prevenative care or a routine eye exam. If they do have a complaint they tend only to wait a few months(25%) before consulting the Ferris Clinic.

As far as referral sources for the clinic or in general, the proper category was not listed since 42% marked other. 26% marked a relative sent them and 15% a friend referral. Only a mere 1.7% of the patient clientel came in due to media presentation.

CONCLUSION:

It's good news that a moderate percentage of patients are coming in for prevenative care, however they still need to be educated on why it is important. Much more education needs to be given on ocular disease so that the laymen and laywomen can understand it and remember it to pass it down to their children.

This study was not a random study, but selective for the Ferris State University campus and the surrounding area. Thus, these findings cannot and should not be generalized for all populations. The fact that people in this study had very little fear about their eye problems may be skewed slightly since no chronic pathology patients were evaluated. As mentioned earlier a few questions needed to be reworded to get a more accurate presentation of the findings concerning income and education. Also addressing the ocular complaints question, the headache symptom listed should have been reworded such that it was associated with vision or ocular problems.

Much more research needs to be done in this area of optometric sociology. A random study needs to be completed to be able to generalize optometric utilization behavior.

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