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Perspectives of Ophthalmologists on Managing Patient Expectations and Improving Patient Satisfaction

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Abstract

Purpose: To achieve a high level of patient satisfaction, physicians need to identify and address patients' expectations. However, ophthalmologists' attitudes and behavior with respect to patient expectations and satisfaction are not well understood. Therefore, we undertook a study to examine ophthalmologists' attitudes, performance and major determinants of their behavior with respect to managing patient expectations in different settings: public hospitals and private clinics.

Methods: The authors refined a previously validated questionnaire to assess ophthalmologists' attitudes and performance with respect to patient expectations and patient satisfaction in public hospitals and private clinics. The authors surveyed ophthalmologists at the Annual Conference of Ocular Microsurgery in Israel.

Results: Overall, 164 ophthalmologists completed the survey (65.6% response rate), of which 24 (14.6%) were residents and 140 (85.4%) were attendings. Although all the ophthalmologists working at public hospitals believed that it is important to be attentive to patient expectations, only 41.2% reported that they sometimes or always inquire about their patients' expectations; only 2% always asked patients about their expectations. Residents at public hospitals were more likely to ask than attendings (95.8% *vs.* 29.0%, $p<0.001$). Conversely, 98.3% of ophthalmologists working in private clinics reported asking about patient expectations. Overall, 83% of ophthalmologists reported low to moderate awareness of patient expectations and 90% believed they had inadequate training to address patient expectations.

Conclusion: Although addressing patient expectations is perceived as an important part of patient-centered care, most ophthalmologists fail to routinely ask about patient expectations and, consequently, may not respond adequately. These results identify a "blind spot" in ophthalmologists' approach in attempting to address patient expectations and improve patient satisfaction. Our findings emphasize the gaps in ophthalmologists' performance regarding patient expectations in public hospitals as compared to private clinics, suggesting a need for public hospital management to take an active role in increasing ophthalmologists' awareness and performance towards addressing patient expectations.

Keywords: Ophthalmology; Patient expectations; Patient satisfaction; Patient experience; Patient-centered care; Communication; Quality of care

Introduction

Over the past decade, patient-centered care and patient satisfaction have drawn increasing interest, highlighting the importance of incorporating patients' needs and perspectives into care delivery [1,2]. Consistent with this notion, higher levels of patient centeredness and patient satisfaction have been shown to be associated with improved clinical outcomes, health service efficiency and positive effects on health-related business metrics [3-8].

Recent studies suggest that the main determinants of patient satisfaction are associated with effective communication between frontline clinician and patients, in general, and their responsiveness to patient expectations, in particular [9-13]. Moreover, unfulfilled patient expectations were associated with poorer satisfaction [14-16], low clinical guideline adherence [17] and poor overall health outcomes [4,18]. Consequently, a growing body of evidence supports the importance of identifying and addressing patients' expectations in order to achieve high levels of patient satisfaction [14,19-26]. Nonetheless, previous studies have emphasized that clinicians frequently neglect to solicit information about patients' expectations [19,25,27-29], tending to underestimate or not recognize them [30,31], resulting in unmet expectations and lower satisfaction [16,29,30].

The field of ophthalmology is constantly growing and developing. Due in part to rapid advancements in diagnostic and therapeutic tools, ophthalmology includes numerous subspecialties, involving surgical and medical care performed in public and private clinic settings. Simultaneously, ophthalmologists deal with patients with a myriad of needs and expectations. Consistent with other fields in healthcare,

studies suggest that meeting patients' expectations in ophthalmology is a key determinant of patient satisfaction and is also primarily related to ophthalmologist-patient interactions [32,33].

Despite interest in patient-centered care and the growing understanding of the importance of addressing patient expectations, relatively little research has focused on ophthalmologists' attention and attitudes towards patient satisfaction and patient expectations. Therefore, we undertook a study to examine ophthalmologists' attitudes, performance and major determinants of their behavior with respect to managing patient expectations in different settings: public hospitals and private clinics.

Materials and Methods

Study design and survey instrument

We conducted a cross-sectional study in which we surveyed ophthalmologists (residents and attending physicians) from Israel on January 1-3, 2011. The survey instrument was developed based on a previously validated questionnaire, a systematic literature review and in-depth interviews with ophthalmologists and researchers in the fields of patient satisfaction. Survey research experts further reviewed the draft survey to ensure comprehensibility and clarity. We conducted a pilot study with 20 ophthalmologists, after which the questionnaire was modified and shortened accordingly. To check the internal validity of the survey, we reversed several questions; the responses were symmetric, suggesting good internal validity.

The final questionnaire included 31 closed-ended questions in Hebrew and consisted of four main sections: Section 1 was related to subjects' characteristics, such as type of ophthalmologist (resident/attending), years of clinical experience, main subspecialty, active surgeons, administrative management role, workplace, and gender; Section 2 investigated ophthalmologists' experiences related to patient expectations and satisfaction in each of their work settings (e.g., "Do you routinely ask your patients at the hospital about their expectations from the care and service you provide them?" and "Do you routinely ask your patients at the private clinic about their expectations from the care and service you provide them?"); Section 3 investigated ophthalmologists' perceptions towards patient expectations and patient satisfaction in depth (e.g., "In your opinion, what are physicians' levels of awareness towards patient expectations?" and "In your opinion, is it important that physicians talk with patients about their expectations?"); finally, Section 4 examined ophthalmologists' perceptions towards the hospitals' and private clinics' management activities (e.g., "Does your main working place have a structured plan for managing patient expectations?" and "In your opinion, should the institution management take a more active role in increasing the awareness of the medical staff related to patient satisfaction?").

Section 1 included multiple-choice questions with the option to add additional information (e.g. other-please specify) when the answer did not correspond to the given categories. Most of the multiple choice questions in Sections 2-4 used 3 or 4 point scales. For example, the question "In your opinion are physicians formally trained to cope with patient expectations?" had the options of 'Yes', No', and 'Don't Know', while the question about physicians' level of awareness towards patient expectations, for example, gave 'Low', 'Moderate', 'High', and 'Don't Know' as possible responses. Finally, some multiple choice responses were subsequently dichotomized during the analysis: 'No'/'Don't Know' indicating the absence of an attitude/practice versus 'Yes' indicating the presence of the attitude/practice; 'Low'/'Moderate' indicating modest awareness versus 'High' indicating substantial awareness of patient expectations.

Study population and survey administration

All ophthalmologists surveyed in this study worked in specialized ophthalmology units at public hospitals or private clinics. In some cases, they worked in both settings.

In order to secure a high response rate, our research team administered the survey in person at the Annual Conference of Ocular Microsurgery in Eilat, Israel on January 1-3, 2011. The Annual Conference of Ocular Microsurgery is the biggest meeting in ophthalmology in Israel, attended by the majority of ophthalmologists. The meeting represents a unique encounter for all ophthalmologists from various subspecialties and comprehensive ophthalmology, including both junior (residents) and senior (attending) physicians.

The ophthalmologists participating at the conference received an envelope containing an explanation cover letter and the survey and were instructed to return the survey within the sealed envelope to a closed box placed conveniently at the conference venue. Participating physicians were told that their participation in the study was voluntary, confidential and anonymous verbally and via a written cover letter. Additionally, the letter explained the study's rationale and importance. The study protocol and survey instrument were approved by the conference committee as well as by the Israeli Ophthalmology Society.

Statistical analyses

The questionnaires from the conference were collected by the research team. They were visually inspected and audited by the research team in Israel and then audited again and entered into a database at Brigham and Women's Hospital (BWH), Boston, USA. The data were then analyzed at BWH. SAS (V.9.2) was used for data analysis, including chi-square tests and analysis-of-variance testing for univariate analyses. Multivariable analyses were conducted using logistic regression. All statistical tests were conducted at the 95% confidence level using Pearson's Chi-square test for independence on contingency tables.

Results

Of 250 ophthalmologists that participated in the Microsurgery Conference, 164 completed the survey, yielding a response rate of 65.6% (Table 1). The study population included 140 attending's (85.4%) and 24 residents (14.6%). Almost one-third (29.3%) of the ophthalmologists worked only in public hospitals, one-fifth (20.1%) only in private clinics, and half (50.6%) worked in both settings. Approximately 43% of responders had less than 7 years of hospital experience, and the rest were divided almost equally across the other subcategories of experience. Around one third (35.4%) were cornea subspecialists, with cataract (23.8%), comprehensive ophthalmologists (14.6%) and retina (12.2%) as the other main subspecialties. Almost all the responders were active surgeons (98.8%) and 44.5% held a management position.

Characteristics	No. of Respondents (N=164)	Percentage of Respondents
Ophtalmologists		
Resident	24	14.6
Attending	140	85.4
Years of clinical experience		
≤ 7	71	43.3
8-10	43	26.2
≥ 11	50	30.5
Workplace*		
Public Hospital only	48	29.3
Private Clinic only	33	20.1
Public Hospital & Private Clinic	83	50.6
Main subspecialty†		
Comprehensive ophthalmology	24	14.6
Cornea	58	35.4
Cataract	39	23.8
Retina	20	12.2
Glaucoma	11	6.7
Refractive surgery	11	6.7
Neurophthalmology	1	0.6
Active surgeon		
Yes	162	98.8
No	2	1.2
Management position		
Yes	73	44.5
No	91	55.5
Gender		
Female	57	34.8
Male	107	65.2
† Plastic surgery not shown because no respondent had it as main subspecialty.		

Table 1: Characteristics of respondents.

Ophthalmologists behavior

Regarding the main research question, "Do you routinely ask your patients about their expectations from the care and service you provide them?", only 41.2% of the ophthalmologists stated that they sometimes or always inquire at the public hospital whereas 98.3% reported doing so in private clinics (Table 2). Moreover, barely 2% of the ophthalmologists working at the hospital stated that they always asked patients about their expectations. Residents at public hospitals were more likely to ask than attending's (95.8% *vs.* 29.0%, respectively, $p<0.001$). The results varied among ophthalmologists' with different years of clinical experience; although there was no clear pattern between clinicians' years of experience and their behavior, ophthalmologists from public hospitals with more than 11 years of experience were much more likely to inquire about patient expectations then those with 8-10 and less than 7 years of experience (84.9% *vs.* 2.9%, 39.7%, respectively, $p<0.001$). Finally, the results also varied among the respondents with different subspecialties (Table 2).

	Public hospitals (N=131)	**Private clinics (N=116)**
Characteristics	p-value n/N (%)	p-value n/N (%)
Total number of ophthalmologist's who ask	54/131 (41.2%)	114/116 (98.3%)
Type of Ophtalmologists	<0.001	0.89
Resident	23/24 (95.8)	1/1 (100)
Attending	31/107 (29.0)	113/115 (98.3)
Years of clinical experience	<0.001	0.65
≤ 7	25/63 (39.7)	30/30 (100)
8-10	1/35 (2.9)	32/33 (97.0)
≥ 11	28/33 (84.9)	52/53 (98.1)
Subspecialities	<0.001	0.004
Comprehensive ophthalmology	25/28 (89.3)	2/3 (66.7)
Cornea	5/8 (62.5)	38/39 (97.4)
Cataract	2/57 (3.5)	41/41 (100)
Retina	2/4 (50.0)	11/11 (100)
Glaucoma	0/12 (0)	1/1 (100)
Refractive surgery	19/20 (95.0)	20/20 (100)
Neurophthalmology	0/1 (0)	1/1 (100)
Pediatric ophthalmology & strabismus	1/1 (100)	0
Active surgeon	0.96	<0.001
Yes	52/126 (41.3)	112/113 (99.1)
No	2/5 (40.0)	2/3 (66.7)
Management position	0.001	0.92
Yes	25/40 (62.5)	61/62 (98.4)
No	29/91 (31.9)	53/54 (98.2)
Gender	<0.001	0.41
Female	8/47 (17.0)	29/29 (100.0)
Male	46/84 (54.8)	85/87 (97.7)

* Ophthalmologists that stated that they are sometimes or always asking the patients about their expectations.
n=number of ophthalmologists who ask the patients about their expectations in each setting.
N=total number of ophthalmologists for each characteristic. N varies across the different settings.
p-value refers to the difference in distribution of ophthalmologists who ask/do not ask between the categories of each characteristics.

Table 2: Characteristics of ophthalmologists who ask* patients about their expectations in different clinical settings.

Ophthalmologists' awareness towards patient expectations

Overall, 83% of the ophthalmologists stated that they have a low to moderate awareness of patients' expectations. None of the 24 residents reported being highly aware about patients' expectations. 25 out of the 140 (17.9%) attending physicians reported being aware of patients' expectations. Similarly, we found that none of the ophthalmologists working primarily in a public hospital were highly aware of patient's expectations, but that 45.5% of the ophthalmologists working primarily in a private clinic were highly aware of patients' expectations. Ophthalmologists with a management position had a higher awareness of patients' expectations compared to ophthalmologists without a management position (30.1% *vs.* 3.2%, respectively, p<0.001), and

those with more years of clinical experience had a higher awareness of patients' expectations compared to those with less years of experience (32% *vs.* 7.8%, respectively, p<0.001).

Attitudes towards patient expectations

Overall, 100% of the ophthalmologists believed it was important to ask patients about their expectations. However, 40.8% of them stated that this was the nurse's role rather than the physician's role. Female physicians were more likely to believe that it is important for physicians to ask than male (96.5% *vs.* 39.2%, respectively, p<0.001), and attending physicians were more likely to believe that it is important for physicians to ask than resident physicians (65.7% *vs.* 20.8%, respectively, p<0.001). Less than half of the ophthalmologists (45.9%) in the public hospitals believed that it is important for physicians to ask patients. In contrast, 85.5% of the ophthalmologists in private clinics believed it was important for physicians to ask patients.

Ophthalmologists' competence in coping with patients expectations

The majority of ophthalmologists (93.3%) felt that they have not received adequate training to handle patients' expectations. There was no statistical difference in this response between residents and attending physicians, and those working at public hospitals and private clinic (p=0.16 and 0.08, respectively).

Predictors of managing patient expectations in public hospitals

We found no significant association between ophthalmologists' beliefs related to the importance of asking their patients about their expectations and their performance regarding asking about expectations (odds ratio (OR) 1.45; 95% confidence interval (CI) 0.67 to 3.13). The major determinants of addressing patient expectations among ophthalmologists who worked in public hospitals were ophthalmologists' type, management position, and level of awareness (Table 3). Multivariate analyses revealed that residents were eighty times more likely to ask about patients' expectations than attending's (OR 80.33; 95% CI 11.83 to 545.47). Ophthalmologists with management positions were sixteen times more likely to inquire than ophthalmologists without management positions (OR 16.29; 95% CI 4.77 to 55.66). Ophthalmologists with greater awareness were over six times more likely to inquire than those with lower awareness (OR 6.60; 95% CI 1.80 to 24.23).

Variable	OR	95%CI	P value
Ophthalmologists' attitudes regarding the importance of asking patients about their expectations (Yes vs. No)	1.45	0.67-3.13	0.34
Resident vs. Attending	80.33	11.83-545.47	<0.001*
Management position (Yes *vs.* No)	16.29	4.77-55.66	<0.001*
Level of awareness of clinicians with respect to patient expectations (High vs. Low/Moderate)	6.60	1.80-24.23	0.005*
*Predictors of asking about patient expectations in public hospitals that were found to be statistically significant in multivariable logistic regression. The models were adjusted for type of ophthalmologists, years of clinical experience, main subspecialty, management position and gender.			

Table 3: Predictors for asking patients about their expectations in public hospitals.

	Ask patients' about their expectations in private clinics		
Ask patients' about their expectations in public hospitals	No	Yes	Total
No	1 (1.3%)	45 (60.0%)	46 (61.3%)
Yes	1 (1.3%)	28 (37.3%)	29 (38.7%)
Total	2 (2.7%)	73 (97.3%)	75*
P value<0.001 (Exact McNemar test). * While 83 respondents indicated working in both settings, not all responded to both questions.			

Table 4: Change in behavior (asking/not asking patients about their expectations) of same ophthalmologists when practicing in Public hospitals *vs.* Private clinics.

Ophthalmologists' behavior in the public sector *vs.* the private sector

Overall, 83 (50.6%) of the ophthalmologists in our sample worked in both public and private settings (Table 4); of these, 75 answered questions related to their work in each setting. Out of this group, 97.3% stated that they routinely ask their patients about their expectations while working in their private clinics, while only 38.7% reported doing so while working in the public hospitals. Moreover, 61.3% of these ophthalmologists reported different behaviors regarding asking patients about their expectations in the two settings (i.e. did not ask in one setting and did ask in the other). Of the ophthalmologists who did not ask patients in the public hospital setting, 97.8% of them did ask in the private clinic setting.

Discussion

In this study, we evaluated the attitudes and performance of ophthalmologists practicing in public and private settings regarding patient expectations and satisfaction. We found that although all the ophthalmologists at public hospitals perceived that it is important to be attentive to patient expectations, less than half of these ophthalmologists reported that they sometimes or always inquire about their patients' expectations. Moreover, only 2% always asked patients about their expectations (Figure 1). Notably, these figures were quite different for ophthalmologists at private clinics, where almost all of them (98%) reported doing so. Overall, 83% of physicians reported low to moderate awareness of patient expectations and 93% believed they had inadequate training to address patient expectations.

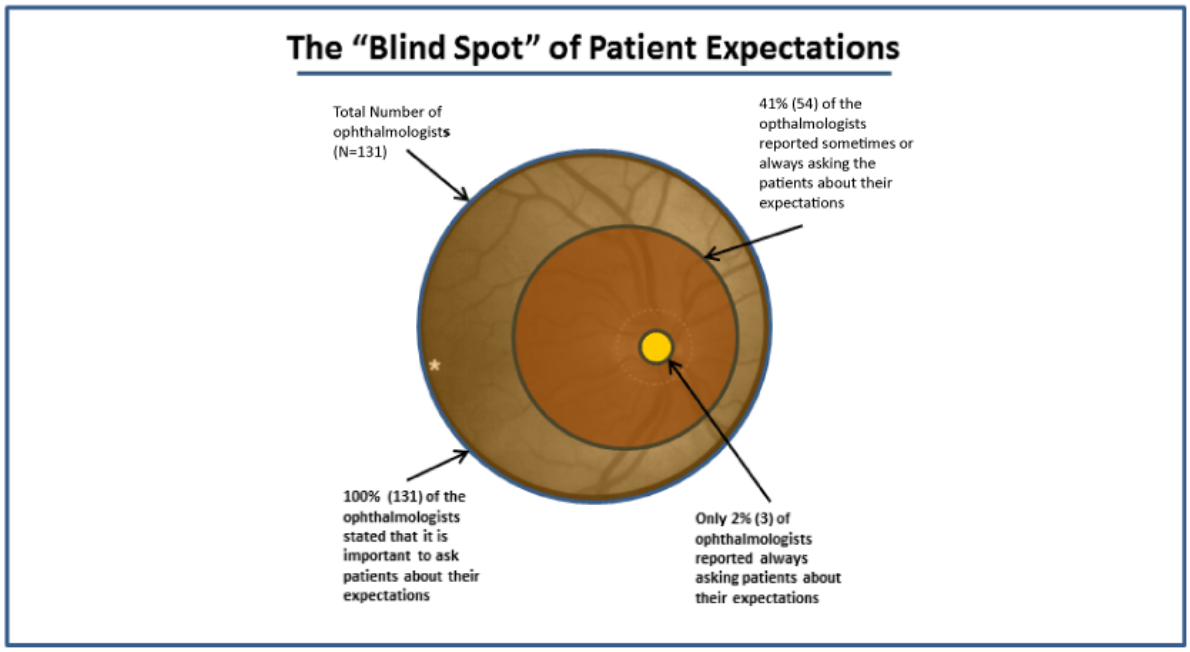

Figure 1: The blind spot of patient expectations at public hospitals. The figure illustrates the proportion of ophthalmologists always asking patients about their expectations (Lined blue), compared with ophthalmologists that always/sometimes ask (Light blue). The full circle represents the number of responders in the survey who think it is important to ask.

These findings are consistent with our previous studies in different settings, which showed a similar unrecognized gap between the importance clinicians place on addressing patient expectations and their performance, revealing what we call the "blind spot" of patient expectations and satisfaction. In our original inpatient study of 1004 clinicians at four hospitals in different countries, we found that while 89% of clinicians believed it was important to ask about patient expectations, only 16% reported doing so. Moreover, this study also revealed that the majority of clinicians had low or moderate awareness and inadequate training to deal with patient expectations. In a subsequent study that we conducted to evaluate the attitudes and performance of clinicians towards patient satisfaction at outpatient adult congenital heart disease clinic, we also found similar gaps [28]. Consistent with this notion, other studies have shown that clinicians frequently neglect to solicit information about patients' expectations [19,25,29], and consequently do not meet them [16,29,30], resulting in low levels of patient satisfaction [14-16].

Our study confirms and builds on previous findings that reveal poor clinician performance regarding patient expectations and satisfaction by also identifying the predictors of physician's performance regarding patient's expectations. While we found no association between those who thought it was important to ask and those who actually did, ophthalmologists at public hospitals who were residents, held a management position, or had a high awareness about patient expectations were significantly more likely to ask patients about their expectations.

Most significantly, our study is one of the first to reveal that physicians tend to change their behavior related to patient expectations and satisfaction when working in different clinical settings. About fifty percent of the ophthalmologists in our sample worked in both public and private settings; 61% of these ophthalmologists reported different behaviors regarding asking patients about their expectations in the two settings. For example, of the ophthalmologists who did not ask patients about their expectations in the public hospital, 98% of them did ask in the private clinic setting. Finally, we did not find the same gap between ophthalmologist's attitudes and performance related to patient expectations at private clinics. Almost all of the ophthalmologists practicing at private clinics who believed it was important to ask patients about their expectations reported that they do ask, revealing different behavior than in the public sector.

While there are a variety of potential factors that could contribute to the difference in behaviors related to patient expectations and satisfaction in the public and private settings, we believe that this change may be related to different "cultures" within these sectors, as

well as the incentives motivating physicians in each setting. These findings complement those of our previous study conducted in public hospitals, which found that while public hospital management asserts that patient-centered care is important and invests in patient experience surveys, the majority do not have a structured plan for promoting improvement of patient satisfaction or engaging clinicians in the process [34]. Specifically, this study found that only 1 in 10 clinicians stated that their department had a structured plan to promote improvement of patient satisfaction and only one-third recalled having received feedback from their hospital management regarding patient satisfaction status [34]. Thus, this new data raises additional concerns regarding public hospital management activities related to meaningful engagement of physicians in the patient experience improvement process and consequently physicians' insufficient attentiveness and responsiveness towards patient's expectations.

Additionally, we believe that the ophthalmologists' behavior change may be due to the vastly different incentive structures that exist in these two settings. In Israel, public hospital physicians are usually paid a fixed salary, regardless of procedure or patient load. Conversely, physicians at private clinics are paid in a fee-for-service model. Moreover, private ophthalmology clinics function by word of mouth recommendation based on positive customer service experiences, whereas most patients using public healthcare receive their care at public hospitals based on the guidelines of their insurer (sick fund). Thus, ophthalmologists at private clinics may have direct financial incentives to be more attentive and responsive to their patients' expectations and overall experience.

Ophthalmology literature has focused its study of patient satisfaction around a few mainstream procedures (e.g. cataract surgery, LASIK surgery) and their clinical outcomes [32,33,35-42]. The majority of this work is limited to the effects of different procedures on clinical outcomes and patient satisfaction. A much smaller portion of studies have explored the main determinants of patient satisfaction in ophthalmology and the role of patient expectations in this dimension of health care quality [32,33]. For example, a study assessing the determinants of patient satisfaction with waiting time for cataract surgery found that both patient expectations of waiting time and actual waiting time had a significant effect on patient satisfaction [33]. Another study found that expectation-outcome discrepancy was predictive of satisfaction while improvement in visual function from cataract surgery was not [32]. Dawn and colleagues identified 22 areas of expectations for eye care which were classified into 5 categories: communication, interpersonal manner, physician's skill, logistics, and other [43]. This study found that although patients' expectations for eye care vary, most of their expectations were related to communication and interpersonal manner; comparably few expectations related to technical interventions, such as medication prescriptions, physical examination, or diagnostic testing [43].

These studies suggest that meeting patients' expectations in ophthalmology is primarily related to ophthalmologist-patient interactions. Yet, a significant discordance between patients' priorities and their ophthalmologists' perceptions of these priorities was found in a study related to cataract surgery [44]. Moreover, a study of glaucoma patients suggested that interventions to improve doctor-patient communication should be tested as methods to improve the outcomes of glaucoma care [45]. These studies together indicate that improving ophthalmologist-patient interaction, in general, and attentiveness to patients' expectations, in particular, could significantly improve patients' satisfaction, as in other care settings, and potentially even positively affect clinical outcomes. To our knowledge there have been no other studies in ophthalmology that have attempted to identify and analyze ophthalmologists attitudes, performance and major determinants of their behavior with respect to managing patient expectations in public hospitals and private clinics. Thus, our data shed light on the gaps that exist in ophthalmology related to patient expectations and enchantment of patient satisfaction.

This study has a number of limitations. Due to the cross-sectional design, we have shown association but cannot confirm any causal relationships. Further investigation of how these findings change over time would be helpful. Like all surveys, our study may have been subject to a potential response and selection bias. It is likely that we selected ophthalmologists who are sufficiently motivated to have attended the Annual Conference of Ocular Microsurgery in Israel. This would have been important had we found a high rate of clinicians inquiring about patient expectations. However, even in this highly motivated group of ophthalmologists, the proportion inquiring about patient expectations was very low in public hospitals. Finally, it is important to mention that in this study we did not include specific questions about the organizational "culture" or what motivates physicians to ask (or not ask) about patient expectations, and therefore, we cannot say for certain that financial incentives drive this performance difference. Although, we believe this could explain physicians' behavior, further research should be done to explore financial incentives and/or other factors which encourage or discourage physicians to inquire about patient expectations in public and private settings.

Patient expectations and patient satisfaction represent an increasingly well-recognized metric of quality of care, yet data examining ophthalmologists' attitudes, performance and major determinants of their behavior with respect to managing patient expectations in public hospitals and private clinics are scant. Our findings emphasize the gaps in ophthalmologists' performance regarding patient expectations and satisfaction in public hospitals, as compared to private clinics. Moreover, it appears that ophthalmologists' lack both awareness and adequate training to address patients' expectations. Finally, this study suggests the need for public hospital managements to take an active role in increasing ophthalmologists' awareness towards patient expectations, initiating structured programs for improving physician-patient communication and managing patient expectations, and even consider incentivizing ophthalmologists to deliver this dimension of healthcare quality.

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