

Solving The Puzzle of Dry Eye, One Question At A Time

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Introduction

An estimated **33%** of patients in eyecare clinics present with complaints of dry eye.⁸

Imagine a world where there was one succinct and universal dry eye questionnaire used to quickly summarize a patient's dry eye journey. The aim of our research is to create such a document.

According to the International Dry Eye Workshop (DEWS), dry eye syndrome is a "multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface."

Dry eye disease is multifactorial in nature, therefore its treatment and management are too. In order to properly treat a patient with dry eye syndrome, the practitioner must know all about the patient's relationship with dry eye.

Treatment of dry eye syndrome generally aims at increasing tears, maintaining tears, triggering tear production, or healing inflammation. Treatment usually begins with the recommendation of consistent use of artificial tears.

Methods

For this project, we carefully combed through current dry eye questionnaires and surveys in order to construct the ultimate dry eye questionnaire. We worked heavily with the TOFS DEWS II Report which highlights all aspects of ocular surface disease. We used our clinical experience, collegiate textbooks, and articles formulated by reputable institutions and sources. We conducted internet searches with key words such as, "dry eye questionnaire," to view what is already being used in clinics around the nation.

We then organized various dry eye questions pertaining to symptomology, past treatment, current treatment, and patient expectations onto one succinct form. This form also includes pertinent patient history such as systemic diseases and current medications that are specifically related to dry eye disease. The questions included on the form are those that through our research, have been deemed most beneficial in moving forward with patient treatment, while better understanding patient history.

Results

To ensure ease of use, we created an 18-question dry eye questionnaire that can be printed on one two-sided form. The questionnaire contains questions about patient health history, dry eye history, current symptoms, and past and current treatment.

Tell Us About Your Dry Eye Journey
Patient Name: _____
Date: _____

1. Do you have any of the following symptoms? Check all that apply.
 Dryness
 Redness
 Burning
 Itching
 Light sensitivity
 Excess tearing/watering
 Foreign body sensation
 Tired eyes
 Stringy mucous
 Crusting
 Lids stuck shut in the morning

2. Do you have fluctuating vision problems that get better with blinking?
 Yes
 No

3. Are your symptoms related to the following environmental conditions?
 Wind
 Low humidity (ex. airplanes, hospital)
 Air conditioning/Heating

4. Do you think you have dry eye?
 Yes
 No

5. How often do you experience dryness?
 None
 Sometimes
 Frequently
 Always

6. Do you have dry nasal passages or dry mouth?
 Dry nasal passages
 Dry mouth
 Neither

7. Diagnosed with dry eye?
 Yes
 No

8. Do you use artificial tears?
 No
 Yes, Type:
• Refresh tears
• Visine
• Soothe
• Refresh liquidgel
• Systane
• Thera tears
• Optive
• Blink
• Other _____

Brands you tried that didn't work:
 Have you used them today?
 Yes
 No
 How often do you use them? _____ times a day
 How long are they effective? _____ hours

9. Do you use a gel or ointment artificial tear at night?
 Yes, Brand: _____
 No

Figure 1: First page of dry eye questionnaire containing questions 1-9.

Figure 2: Second page of dry eye questionnaire containing questions 10-18.

10. Previous dry eye treatments? Were they successful? Check all that apply
 Artificial Tears
 Punctal occlusion
 Lid scrubs/massages
 Nutritional supplements (flaxseed oil, omega-3)
 Autologous serum drops
 Restasis
 Xiidra

11. Do you wear contact lenses?
 No
 Yes
• Contact lens discomfort? _____
• Use a rewetting drop? _____
• Comfortable wearing time: _____
• Symptoms when not wearing contacts? _____

12. Have you had any of the following surgeries?
 Cataract
 Glaucoma
 Refractive (Lasik, PRK, RK)

13. Ocular medications?
 Glaucoma drops (Latanoprost, Timolol)
 Allergy drops
 Other _____

14. Which of the following conditions have you been diagnosed with? Check all that apply:
 Blepharitis
 Stye
 Arthritis
 Sjogren's Syndrome
 Multiple sclerosis
 Acne rosacea
 Thyroid disease
 Lupus

15. Systemic medications?
 Birth control pills
 Beta blockers
 Diuretics ("water pills", Lasix)
 Antihistamines/decongestants
 Anti-depressant/Anti-anxiety
 Hormone replacement therapy
 Corticosteroids
 Topical Azithromycin
 Oral doxycycline
 Accutane
 Fosamax

16. Special considerations?
 Pregnant/nursing
 Air travel > 2x/ month
 Routine ceiling fan usage
 Computer use > 1 hr/day
 Tobacco user
 Alcohol user
 Allergies
 Use of CPAP machine

17. Did you use makeup, moisturizer, lotion, or creams around your eyes today?
 Yes
 No

18. Have you touched/rubbed your eyes today?
 Yes
 No

Conclusion

We organized various dry eye questions pertaining to symptomology, past treatment, current treatment, and patient expectations onto one succinct form. This form also includes pertinent patient history such as systemic diseases and current medications that are specifically related to dry eye disease. The questions included on the form are those that through our research, have been deemed most beneficial in moving forward with patient treatment and management, while better understanding patient history.

The resultant dry eye questionnaire is a form that can be filled out quickly in office or sent home and reviewed before the patient enters the exam room. This will allow practitioners to prepare efficiently and provide more personalized dry eye care for each of their patients in a variety of optometric settings.

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