Non-tolerance: causes, avoidance, opportunity

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DISCLOSURE
- Paid lectures, KOL/product feedback, research funding:
  - American Academy of Optometry (UK), Association of Optometrists, British Contact Lens Association, British College of Optometry, British College of Low Vision, British College of Orthoptics, British Optometric Association, College of Optometrists, Contact Lens Standards Group, Contact Lens Vision Group, European Society of Paediatric Ophthalmology, Leightons
- Lecture content always my own
- Author of Pickwell’s Binocular Vision Anomalies, editions 3-5
- I.O.O. Sales Ltd markets IFS orthoptic exercises, which the speaker designed, and for which he receives a small royalty
- Community optometric practice in Brentwood, Essex

PLAN
- CLASSIFICATION
- WHY
- PREVALENCE
- AVOIDANCE
- CONCLUSIONS

Classification of spectacle non-tolerance
- Two main types (Priest, 1979)
  - Dispensing non-tolerance – main causes (Farrell, 2005):
    - Incorrect frame fitting
    - Optical centration problems
    - Spectacle magnification problems
    - Cosmetic reasons
    - Mis-communication
  - Prescription non-tolerance
    - “A prescription that the patient finds so hard to tolerate that they return to the prescriber” (Freeman & Evans 2010)

Classification of Rx non-tolerance (Ball, 1977)

<table>
<thead>
<tr>
<th>Practitioner orientated</th>
<th>Dispensing errors and associated problems</th>
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<td>Faulty refractive prescription</td>
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<td>Undetected or subsequently developed abnormality</td>
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<td>Management of initial examination</td>
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<td>Patient orientated</td>
<td>Adaptation problems</td>
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<td>Psychology</td>
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<td>Motivational expectation; dissatisfaction</td>
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| Practitioner/patient relationship | Attributes, personality patterns, Practice environment |
Goal of subjective refraction
(Duke-Elder & Abrams, 1970)

- “to provide the patient with the optical correction nearest to the optical ideal with which he sees best and is most comfortable”
- Non-tols are really an “adverse effect of an optical prescription”

Prevalence of prescription non-tols
(Freeman & Evans, 2010; Evans, 2012)

- Non-tols occur in 1.8% of eye exams
  - Range (7 optoms) 1.3% to 3.3% Freeman & Evans (2010)
  - This has been estimated to be 2.8% of those who are prescribed spectacles Head-Duffy et al. (2010)
  - But, this research excluded cases that had been dealt with by a dispensing optician Freeman & Evans (2010)
Demographics of prescription non-tols
(Freeman & Evans, 2010)
- 3091 eye exams in 6/12
  - Large independent optometric practice, 11 optoms in 5 consulting rooms
  - 82 non-tols, 59 included
  - Most common in 50-59y
  - 88% of non-tols presbyopes
  - Male = female
  - None were neophytes (not significantly different to control group)
  - All could be resolved with an adjustment of 1.00D
    - 84% with 0.50D adjustment

Reasons for non-tol examinations
(Freeman & Evans, 2010)
1. Prescription related 61%
2. Dispensing related 22%
3. Pathology 8.5%
4. Data entry error 6.8%
5. Binocular vision 1.7%

Prescription related non-tols (61%)
(Freeman & Evans, 2010)
1. Error measuring the sphere
   - 20% of all non-tols
     - Half plus – all over-plussed
     - Half minus – most under-minussed
2. Error with NV/IV addition
   - 17% of all non-tols
     - 2/3 of these over-plussed
3. Errors with cyl
   - 10% of all non-tols
4. Errors with sphere & cyl (3%)
5. Errors relating to adaptation
   - 10% of all non-tols
   - For 1/3 returned to old Rx

Dispensing related non-tols (22%)
(Freeman & Evans, 2010)
1. PAL adaptation
2. PAL heights
3. SV lens type
4. Frame adjustment
5. PAL prism thinning
   - A total of 1938 lenses were dispensed during the 6 month period.
   - In this study, the lenses that were most often not tolerated were
     - PALs (7.4%)
     - Vocational lenses (4.8%)
     - Single vision lenses (2.0%)
     - Bifocal lenses (0.8%)

Pathology related non-tols (8.5%)
(Freeman & Evans, 2010)
- Cataract in nearly all cases
  - Typically, large Rx changes from nuclear sclerisis that caused non-tol when full Rx prescribed
  - One case of dry eye

Data entry non-tols (7%)
(Freeman & Evans, 2010)
- Entering incorrect reading addition
- Entering incorrect spherical Rx
- Using intermediate prescription instead of a distance prescription,
- Making up near vision glasses instead of bifocals
Binocular vision anomalies (2%)
- Beware of convergence insufficiency associated with ageing (Freeman & Evans 2010)
- Don't prescribe multifocals to patients with a superior oblique paresis (Evens 2007)
- Don't prescribe monovision to patients with marked incomitancy (Evens 2007)

Avoidance – dispensing
- Wrong product dispensed correctly or right product dispensed incorrectly?
  - Many PAL issues can be corrected by frame adjustment
  - Check OV fitting crosses & NV fitting crosses using mirrors – is inset correct?
  - Prism thinning occasionally causes non-tols:
    - For myopes, to base their head for 2º even for 0º
    - For hyperopes, base their head for 2º
    - Irregular astigmatism
    - Poorly adapted test frame
    - lenses too thick or too thin
    - By lens or lens from that set over glasses – helps from prism thinning maybe the problem
  - Warn new aspheric wearers that need to adapt
    - Should be decreased from downwards for every 2º of frame tilt
    - If not done at time of dispensing then can compensate by adjusting frame tilt
  - Be alert to issues relating to aniseikonia from anisometropia
  - Off-axis blur in larger frames: consider
    - Frame tilt
    - Face form angle (bow)
    - Vertical lens centration
    - Base curves

Avoidance – prescribing
- Applying “If it ain’t broke don’t fix it” rule would prevent 1/3 of non-tols
  - Measure working distance & don’t over-plus
  - Experienced practitioners modify their Rx to reduce risk of non-tol – partial prescribing
Avoidance – modifying (partial prescribing)

- Howell-Duffy et al. (2011):
  - The likelihood of partial prescribing increased by 34% for every 10y of experience
  - After a 40y career, practitioners would be 3x more likely to modify
  - Practitioners underestimate problems from cyl axis, especially if oblique
  - Examples of partial prescribing
    - If first less myopic than current glasses, don’t prescribe full reduction
    - If large cyl axis change, partially prescribe
    - First-time hyperopic prescription, partially prescribe
    - Partially prescribe large changes in sphere or cyl

Avoidance – communicate

- Warn patients that the average time to adjust to spectacles is 1 week
- Strang et al. (1998)
  - Adaptation can take 1-2 weeks for large changes, especially in astigmatism
  - Elliott & Howell-Duffy (2015)
  - Give extra warning if problems more likely
  - E.g., first pair of PAL lenses

Introduction to communication skills

- The speaker’s personal perspectives from 30 years in practice
- Advanced communication is about customising what you ask and explain accordingly
  - Some people are naturally better at communication, but everyone can learn and improve
  - An empathic disposition helps
  - Think about what people are thinking
  - What fears, anxieties, and other motivation underlay what we say?

Challenging patient 6: the non-tol

- Set the scene
  - Greet as warmly as usual
  - “I’m sorry that you are having problems. The purpose of today is for me to find out what’s going on and to come up with a solution.”
- Interpretation:
  - Rare for there to be smoke without fire
- Strategies
  - Be extra thorough
  - Make sure that you have solved the problem
  - Explain what you can and can’t do

Other considerations

- One study found increased risk of falls when Rx changed
  - Many of the changes in this study were >0.75D
  - Cummings et al. (2007)
- Nearly 10% of non-tols result from pathology
- A “recheck appointment” should not be rushed
  - Look upon this as an opportunity (see next slide)

Are you a trusted source?

- What is a trusted source?
- Why you should want to be a trusted source?
  - Personal view
    - Gaining trust is non-linear
    - Losing trust is non-linear
  - Patients follow recommendations
  - Attract new referrals
  - Longevity of relationship
- Patients perception of trustworthiness
  - Time
  - Practice being trustworthy: True
  - Practice being untrustworthy: False

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**Becoming a trusted source**
1. Assure the patient you know what they want
2. Assure the patient you want what they want
3. Give the patient what they want
4. Explain you are giving the patient what they want
5. Don’t con, don’t distort, don’t over-sell
   - Repeat 1-5 for many years

**Look for culture-defining moments**
- Gailmard (2014) discussed “culture-defining moment”
- Gailmard gives the example of “no-shows”
- The present speaker sees non-tols as culture defining moments
- Johnston (2004): the “recovery paradox”
  - The creation of more delight through good recovery than normal service
  - “What makes excellent service “excellent” and poor service “poor” is very much about how the organisations dealt with problems and queries.”

**Service excellence via non-tols**
- Non-tols are a culture-defining moment
  - Give them more time
  - Most thorough exam
  - Listen more carefully
  - Epictetus (55-135AD):
    - “We have two ears and one mouth so that we can listen twice as much as we speak.”
    - Start with:
      - Listen – repeat – listen
    - End with:
      - Explain – listen – explain

**PLAN**
**CLASSIFICATION**

**WHY**

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**CONCLUSIONS**

**Conclusions**
- Over 80% of non-tols are presbyopes
- Don’t over-plus or under-minus
- The accuracy of refraction (±0.75) is worse than the mean adjustment needed to correct a non-tol (±0.50)
- So discourage patients from separating prescribing and supply
- Partially prescribe
- Warn about adaptation
- Demonstrate the change
- Consider non-tols as an opportunity by excelling at dealing with these challenging patients