

2021 Rising Visionary Recipient



Shervonne Poleon

University of Alabama at Birmingham School of Optometry Vision Science Graduate Program Ph.D. Candidate

Focus on Eye Health Summit: Our Changing Vision





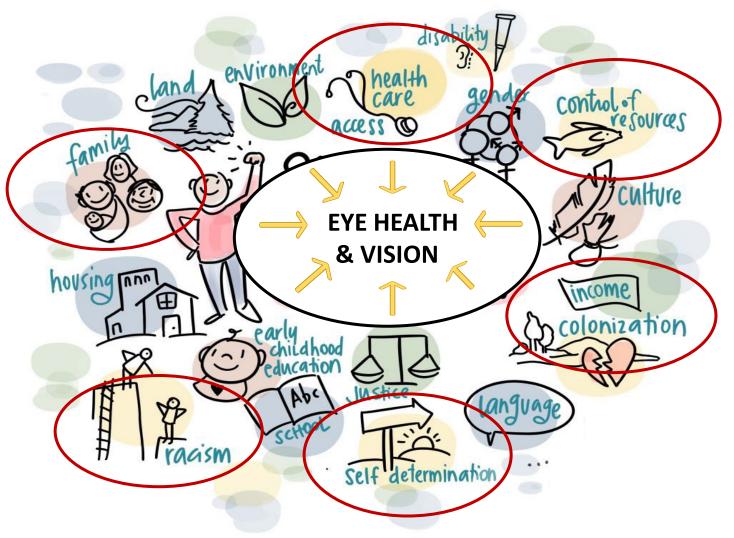


Achieving Equity in Eye Health in a Diverse Population with Evolving Health Needs

Shervonne Poleon
University of Alabama at Birmingham
School of Optometry
Ph.D. Candidate, Vision Science Graduate Program
July 14, 2021









Sociobehavioral Barriers to Eye Care and Eye Health

- In glaucoma, psychological stress (Zhang et al., 2017), cultural differences (Rees et al., 2014), and lack of emotional support (Wang et al., 2019) are barriers to eye care and eye health.
- Despite their influence, many social and behavioral factors may not be adequately discussed during clinic visits (Sleath et al., 2014).
- The patient-provider relationship is a medium for effective communication and the basis for shared decision making (Addario et al., 2018).
- Assess patient and provider perspectives on factors affecting glaucoma treatment



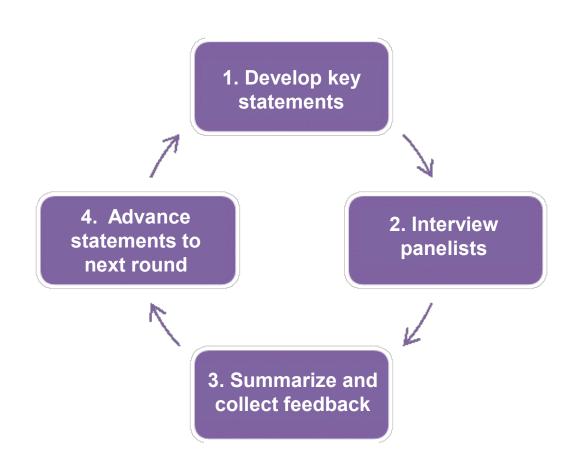
Assess patient and provider perspectives on factors affecting glaucoma treatment

(Delphi survey method; RAND Corporation, 1959)



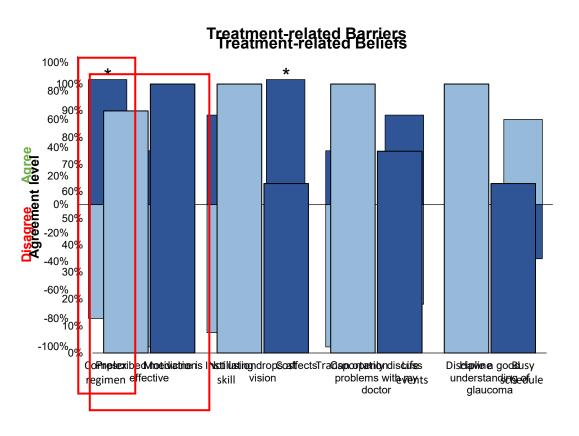
In Delphi surveys, a diverse panel of experts completes multiple rounds of questionnaires to reach consensus on a topic.

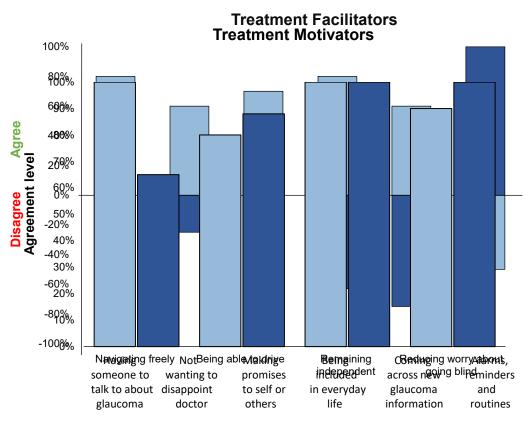
Consensus is reached when 80% or more of panelists agree





Noneonsun Between entipate and army deviders





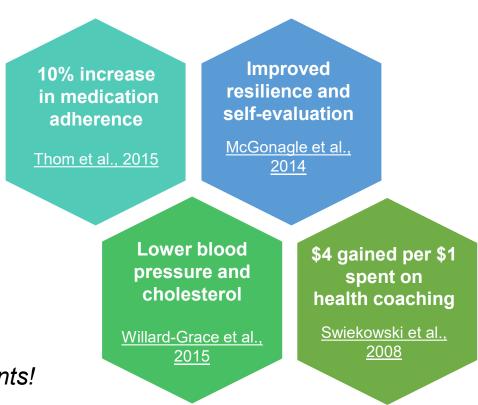




Eye Care Facilitators Within the Clinic Space

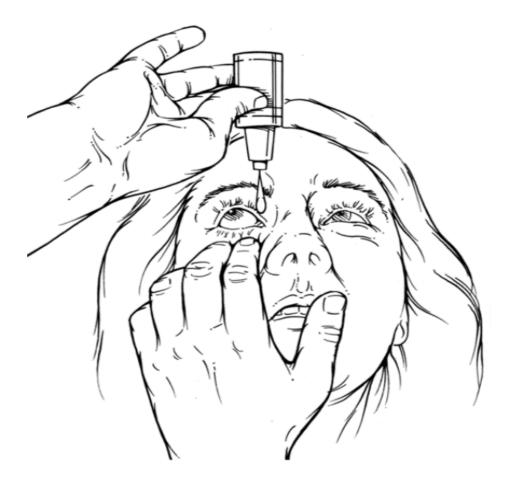
- Trained in patient-centered clinical care:
 - Devote time to addressing individual patient needs
 - Provide health counseling and coaching interventions
 - Connect patients with clinic and community resources
 - Work synergistically with clinicians to improve patient engagement in eye care

• Eye care facilitators may not be equally beneficial to all patients!





Diversity in Health Behavior

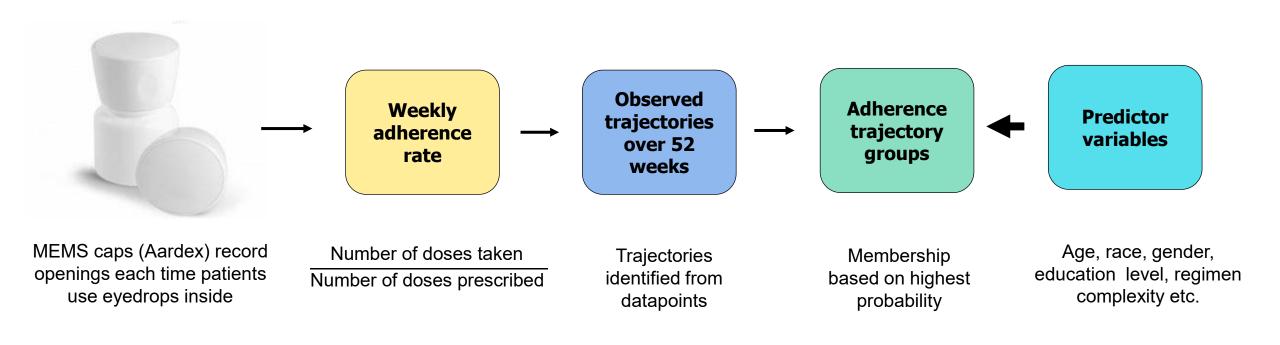


- In glaucoma, hypotensive eyedrops that lower pressure inside the eye are a preferred treatment modality for many patients.
- Higher medication adherence—the degree to which prescribed and actual medication use coincide—is associated with slower glaucoma progression (Newman-Casey et al., 2020).
- Several distinct patterns of adherence have been observed through analysis of pharmacy claims data. (Newman-Casey et al., 2015).
- Identify and characterize patterns of medication adherence in patients with electronically monitored adherence data.



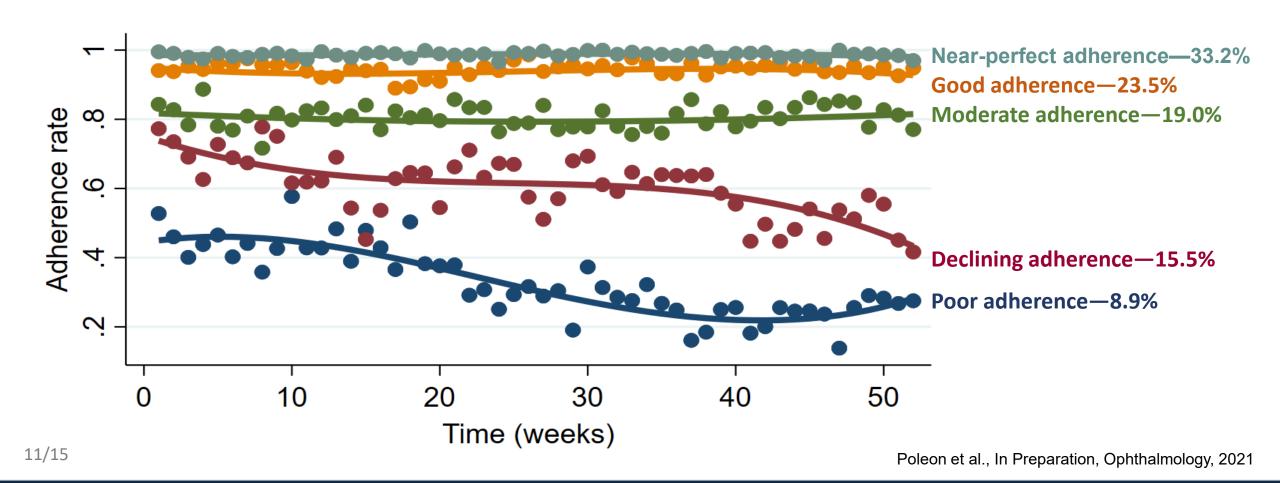
Identify and Characterize Patterns of Medication Adherence

(Group-Based Trajectory Modeling)



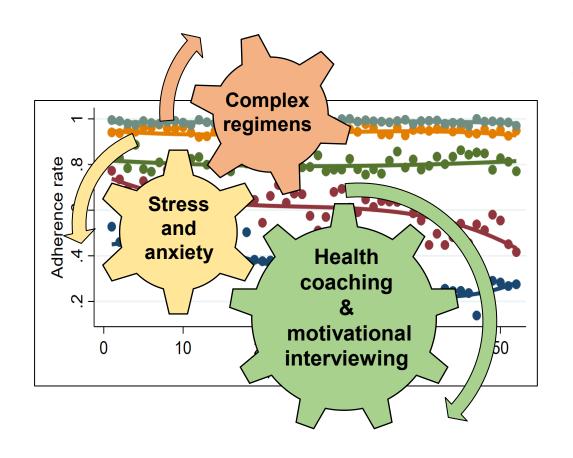


Identified Patterns of Medication Adherence





Characterizing Adherence Groups



Compared to patients with Poor adherence:

- Near-Perfect adherence, Good adherence
 Non-Black race, milder visual field damage
- Moderate adherence

 Non-Black race, higher education level

 What is the true impact of race?
- Declining adherence

More comorbidities, complex medication regimen



Conclusion

How can we achieve equity in eye health given the diverse and evolving needs of the population?

- ✓ Recognize differences in backgrounds, needs and barriers
- ✓ Incorporate these unique needs into clinical research and eyecare delivery

Patients are the greatest untapped resource in healthcare (Bolz-Johnson et al., 2021)

Let us tap into this resource by purposefully and comprehensively addressing the social, economic, cultural, and behavioral factors that shape our changing vision.





Support and Acknowledgements

- R01 grant EY025756
 Vision Science Research Center core grant P30EY003039
- Unrestricted grant from Research to Prevent Blindness
- University of Alabama at Birmingham School of Optometry Vision Science Graduate Program Lawrence Sincich, Ph.D.
 Lyne Racette, Ph.D., FARVO
- Prevent Blindness











Our Changing Vision