EQUITY AND DIVERSITY IN THE AAPM AND JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS

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LEARNING OBJECTIVES

- Recognize equity, diversity, and inclusivity in the scientific publishing process
- Understand how journals are evolving
WHAT IS EDI?

- Equity – Creating conditions that allow everyone to reach their full potential
- Diversity – All the ways that people are different
- Inclusion – Creating an environment of belonging, respect, and support

https://www.equasense.co.uk/equality-equity-diversity-and-inclusion-making-sense-of-the-jargon/
Universities typically host clinical trials, which aren’t always accessible to a diverse population
Low socioeconomic status populations are often taken advantage of
DIVERSITY IN AUTHORSHIP

Race, gender, age, geography, access, experience, language, education, training, money, support

WHY DOES EDI MATTER?

- Pursue a wider range of topics and research questions
- Promote entry of new researchers of all backgrounds to advance and excel throughout their careers
- Benefit all of society through equitable and widespread impact of research outcomes

The preeminence of ethnic diversity in scientific collaboration, AlShebli et al, 2018

A paper with a high impact factor is written by a diverse group of authors. Similarly, a scientist with a high impact factor is surrounded by a diverse group of collaborators.

List is the from the Joint Commitment “What are the benefits of using standardised questions to collect diversity data?”
Most editors of top-cited journals are straight, white men

Research conducted by women receive fewer citations

There is a disproportionately higher rejection rate for authors from underrepresented groups

Male editors: Gender, Race, Ethnicity, and Sexual Orientation of Editors at Leading Medical and Scientific Journals A Cross-sectional Survey (Salazar et al) in 2021

Women citations: Gender Disparity in Citations in High-Impact Journal Articles (Chatterjee et al) in 2021

Underrepresented: Disparities in publication patterns by gender, race and ethnicity based on a survey of a random sample of authors (Hopkins et al) in 2013

The BMJ has outlined the cycle of injustice in the publishing process and defined the role of the journal and editors

The BMJ is one of the publishers that signed the Joint Commitment for Action on Inclusion and Diversity in Scholarly Communications, which I’ll discuss in more detail. As part of that commitment, they’ve evaluated the impact of journals and editors on evolving scientific publishing, with EDI in mind
WILEY AND JACMP’S COMMITMENT

“Joint Commitment for Action on Inclusion and Diversity in Publishing”
Aims to drive positive change within scholarly publishing
1. Understand our research community
2. Reflect the diversity of our community
3. Share success to achieve impact
4. Set minimum standards on which to build

JACMP, publishing through Wiley, abides by the
MINIMUM STANDARDS

1. Ensure inclusion and diversity are integrated into publishing activities and strategic planning.
2. Work to understand the demographic diversity of authors, editorial decision makers and reviewers, such as gender, geography and ethnicity data.

1: tasking leadership to make a statement and a plan within their publication
2: up to editors because they’re the ones that actually see this data, it’s not blinded
Sourced from Wiley Insights for JACMP
No gender or ethnicity data
Nearly every country in the world downloads from the JACMP
Sourced from Wiley Insights for JACMP
No gender or ethnicity data
Data for China is incorrect
Not every country is publishing. Why not?
No gender or ethnicity data
Does the reviewer/editor population reflect the author population? Or the reader population?
Standardized questions from the joint commitment

1. Ensure inclusion and diversity are integrated into publishing activities and strategic planning.

2. Work to understand the demographic diversity of authors, editorial decision makers and reviewers, such as gender, geography and ethnicity data.

3. Acknowledge the barriers within publishing which authors, editorial decision makers and reviewers from under-represented communities experience and take actions to address them.

4. Define and communicate the specific responsibilities authors, editorial decision makers, reviewers and staff members have towards inclusion and diversity.

5. Review and revise as appropriate the appointment process for editors and editorial boards to capture the widest talent pool possible.

6. Publicly report on progress on inclusion and diversity in scholarly publishing at least once a year.
PROVIDE GENDER EQUALITY

- No manels
- Permit authors to change their name post publication
- Double blind review
INCREASE UNDERREPRESENTED AUTHORS

- Provide author services to improve quality and readability
- Provide waivers/discounts for publishing fees
- Provide free/low-cost access to subscriptions
- Encourage data sharing

ESL:
- developing a clear research story
- following English grammar and syntax conventions
- interpreting technical language in manuscript formatting instructions
- deciphering unclear or abrupt feedback from reviewers and editors who may assume that they are a native speaker.
- Manuscript rejections on the basis of language could mean missing out on significant research insights.

Data sharing also expands the pool of individuals who can conduct research. For researchers who are geographically dispersed or have limited resources, open and freely accessible data help foster scientific discovery. The Center for Open Science (COS) aims to “promote opportunity, particularly for those that have less access, as a mechanism to increase equity and to leverage all available talent” (Center for Open Science [COS], n.d.).
UPDATED THE REVIEW PROCESS

- Actively seek diversity when inviting editorials, commentary, blogs, special issues
- Screen offensive content and deal with complaints
- Develop reporting guidelines for diversity in human research

Reporting guidelines for research could potentially reduce the discrepancies in diversity of clinical trials noted in an earlier slide
Diversify your editorial team and advisory board
• Review your recruitment sources, and how you word invitations to join and use networks
• Ask board members to nominate colleagues from underrepresented backgrounds
• Expand your numbers (if needed) to gain diversity
• Consider having observers and/or associate members as a training opportunity. This is a
good way to train new board members, creates earlier career research opportunities, and
can gain more from those more experienced but with limited time

Diversify your peer reviewer pool
• Update your public-facing resources to encourage authors to recommend reviewers from
under-represented backgrounds.
• Review invitation wording to ensure it is always inclusive
• Consider your sources for finding peer reviewers
• Consider your policies on co-reviewing and reviewer mentorship and how they are
credited, this can be a good way of helping new reviewers gain experience.
REVIEWER SELF-REFLECTION QUESTIONS

- Pre-review
  - What personal assumptions, experiences, identities, and beliefs might impact how I perceive and evaluate this manuscript?
  - How do they impact my ability to provide a relatively objective review?
  - How might my cultural and professional worldview impact my evaluation of the manuscript?

- Assessing the manuscript
  - Do the authors report data on race, ethnicity, gender identity, and other facets of cultural identity?
  - How might sampling influence the significance, generalizability, and/or transferability of findings?
  - Does the manuscript address issues or topics relevant to marginalized groups?
  - Do the authors discuss implications for research, practice, training, or advocacy that have the potential to advance social justice?


Pre-Review, Assessing the manuscript, Drafting the Review Letter, On-Going Learning

PreReview: What experiences or beliefs do I have that could impact my perception of this paper?
Assessing: Do the authors report data on race, ethnicity, etc and is their data transferable to other communities?

Review letter: Is my letter helpful and constructive? Does my letter incorporate inclusive language?

Ongoing: Have I self reflected on my own potential unconscious bias? Have I utilized the support provided by the journal?
Madame Curie, a brilliant woman
   Nearly didn’t get the Nobel Prize
   Didn’t get promoted
   Denied membership to the Academy of Sciences
Today, I stand up here as a woman in science, looking out at a diverse population of scientists
There is still room for improvement, but we’ve come so far
THANK YOU