

Presentation 4:

LGBTQIA+ Inclusion: Supporting Trainees and Colleagues

(Two Sides of the Same Coin)

Presenter:

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Slide 4.1: Title Screen

It is an honor for me to be giving this talk today on LGBTQIA+ Inclusion in Medical Physics: Supporting our trainees and colleagues.

My name is Sunshine Osterman, I identify as a lesbian and the Medical Physics Residency Director at NYU. I use She/Her/Hers pronouns.

Slide 4.2: AAPM Statement on Racism, Injustice and Humanity

It's helpful to start with the AAPM statement on Racism, Injustice and Humanity:

AAPM as an organization values the importance of diversity and inclusion, which at its heart, acknowledges the value and worth of every person and all that they bring to our organization, to health care, and to our communities

And why is this important to us as a professional society? It's because we believe Inclusion results in:

- Higher levels of satisfaction and better outcomes for our patients
- More innovation in our research

- Better retention and reduced burnout of our trainees and professionals
- Higher levels of productivity (both short and long term)

Slide 4.3: Justice = Equity and Inclusion

When talking about inclusion, it is helpful to start by defining Equality and Equity. I think this image does a nice job of that.

On the left we have Equality. Each child is given an equal sized box to stand on and watch this baseball game. It doesn't really help them. Only one of them can really see the game well. In the image on the right, we've given them an unequal number of boxes to stand on. This allows them all to see the game, all to participate fully, to cheer and have a good time.

One of the things that is different about this image from other images that I've used in the past is that it emphasizes that it's not the individuals' personal attributes or decisions that are responsible for their lack of access. In fact, all of these children are about the same size, it is the uneven ground underneath - and the unequal barriers in front that have been established by history and policy that determine their access.

Now imagine, one step further, that you are in the position of hiring someone to lead your cheer team and you want to make the hire based on merit and consider recommendations from the baseball team. Which scenario is likely to increase your chances of getting the best child for the job?

Slide 4.4: Inclusion in Medical Physics

Inclusion in Medical Physics to me is about bringing individuals whose voices are not always heard to the table and being responsive to their input and suggestions, their priorities and their insight, supporting research that may add to our knowledge and improve our effectiveness of providing care to those patients whose needs are not currently being met.

And this applies to therapy, diagnostic physics, nuclear medicine, product development and marketing, even.

It's an opportunity to voice our concerns, and hear those of others in an environment that is safe and responsive, and here I mean

Safe: without fear of retribution and

Responsive: careful listening with a reaction that is thoughtful, quick, and positive

So, it's really about how to be an Ally, it's about how to be an educator, and it's about how to be a strong and effective leader.

Slide 4.5: Roadmap

The roadmap for the rest of this talk is as follows:

We know that 5% or more of our patients are LGBTQIA+ and that health inequities persist for this community. I am going to present some data on why representation is so essential in the healthcare provider system, including Medical Physics.

I will outline some of the active work that we can engage in as a profession to improve recruitment, retention and mentoring.

Slide 4.6: Targeting Healthcare Disparity: Adequate Representation

The first study that I'd like to bring to your attention is one that was published in 2020. It looked at over two decades of data and almost 2 million births in the state of Florida, and it showed that controlling for all factors, if you had a Black physician delivering a Black baby, the discrepancy in infant mortality between Black and white babies dropped by 50%.

I think that this is evidence that our colleagues of color and by extension, our LGBTQIA+ and other minority colleagues may be an essential resource if we are to hope to eliminate health disparities.

Slide 4.7: Improving Recruitment

Working off the premise that diversity is important to Medical Physics, we need to look at improving recruitment and some of the specific challenges in that. This study by Hebl et al. in 2002 looked at bias towards homosexual applicants when applying for jobs.

The applicants applied for 6 jobs in a mall wearing one of two printed baseball caps, which manipulated their sexual preference to be either obviously gay or assumed heterosexual based on statements printed on the caps. The interactions with the potential employer was limited to under 5 minutes. Without knowledge of which cap they were wearing; the applicants rated the interactions as less favorable when they were wearing the gay pride hat and their chances of being offered the job lower. These interviews were recorded and scored by a third party who was also unaware of which hat was being displayed.

This tells us is that interpersonal bias and discomfort will show when we are interviewing even in the absence of explicit bias and discrimination. The good news is that it can be eliminated with education and training, so ask for it!

In a 2018 study from Memorial Sloan Kettering in New York City surveyed over 1200 Oncology HCPs and ~1/2 of the respondents got 4 out of the 7 LGBT knowledge questions incorrect, which is not surprising given that typically in medical school, the training on LGBTQIA+ related issues is less than five hours.

Slide 4.8: Recruitment

The take home message from that is that in terms of recruitment, Implicit Bias training for those interviewing and hiring is essential, but it's not enough just to be able

to talk-the-talk. Your applicants are going to be looking for concrete examples of policy and opportunity at your institution.

Whether that's healthcare benefits (do you include health care for domestic partners, are there second-parent adoption benefits or time-off? For example). Is there an employee resource or action groups (Are they visible and active?) Are pronouns displayed on formal communications? Is there a printed non-discrimination policy that includes Sexual and Gender Minorities? And they may even inquire if your facility has a "Leader in LGBTQ Healthcare Equity" designation (HEI).

Slide 4.9: Barriers to Retention (Hostile/Unwelcome Environment)

Assuming we've been successful at hiring, the next question becomes can we keep these hires. Here I will draw from a study of 4th year medical student responses to the AAMC graduation questionnaire. Over 26,000 responses were analyzed and what it found was that ...

Being LGB was associated with increased burnout with an odds ratio of 1.62. Mistreatment accounted for only 31% of the total association between LGB sexual orientation and burnout.

What we're seeing again here is that while explicit mistreatment is very damaging, 2/3 of the association between LGB sexual orientation and burnout, is not stemming from explicit discrimination, Interpersonal discrimination and the associated stresses are significant factors pushing LGB individuals out of the trainee pipeline. And when there is explicit mistreatment and discrimination, lesbian, gay or bisexual students were reporting this mistreatment specific to their sexual orientation had an 8-fold higher predicted probability of burnout compared with heterosexual students.

But what does this look like for early career STEM academicians? Here also, perceived interpersonal discrimination and stress relates to a decline in performance outcomes (some of these long term), specifically this study, by O'Brien et al, measured faculty engagement and participation in institutional service activities.

Slide 4.10: Improving Retention

Luckily that paper also provided us with some guidance on what may help us improve retention.

Perceived support from a supervisor is able to mitigate the effects of interpersonal discrimination on stress in STEM academicians

So here are some things that we can do: Organizing and advertising student, staff and faculty support organizations for LGB; Implementing a mentorship network of out and visible Sexual and Gender Minority faculty; Providing opportunities for further LGBTQIA+ education for both trainees and faculty; and meaningful inclusion of sex, gender, sexual orientation and related patient care topics in discussions and curriculum.

Slide 4.11: Realizing a Training and Practice Environment for Medical Physicists that is Free of Racism, Homophobia, Transphobia and Gender Discrimination

Realizing a training and practice environment for Medical Physicists that is free of racism, homophobia, transphobia, and gender discrimination requires self-education and transformation, implicit bias training related to interactions with Sexual and Gender Minorities. It involves a lot of allyship- including an Equity Diversity Initiative or LGBTQIA+-specific bullet point in recurring meetings, add pronouns to your electronic signature, if someone else's ideas are not heard, repeat and give credit, help establish a safe and responsive workspace where incomplete ideas can be hashed out and materialized into practical solutions. Really try and leverage our humility, be kind, check understanding, apologize when we make mistakes, and all of us will, and avoid defensive responses.

Slide 4.12: Montage

This is a montage of some of the steps we're taking and the activities that are happening at my center. We set up an advisory council for LGBTQ+ identifying patients and their families. It was driven initially by medical oncology. Offering a seat at the table and involving leadership so that we could respond to valuable discussion and inputs that happen at these meetings. A more local one in radiation oncology department, was the LGBTQ+ Action Squad! It's organized by one of our very enthusiastic and knowledgeable medical residents, and we report at the High Reliability Organization Meeting that happens after chart rounds weekly, these activities may include changes in signage in the bathrooms or the collection of SOGI, which is Sexual Orientation and Gender Identity data, into our medical records. (And HRO includes all departmental staff). We're also involved in changing the screening for our GYN brachytherapy patients to ask more identity questions and about symptoms related to both physical and sexual health, changing some of the language to address and acknowledge that not everyone has the same anatomy and not everyone is comfortable referring to that anatomy in the same way.

Slide 4.13: Thank You Team!

I would like to thank my fiercely brave and passionate collaborators and instigators on this AAPM symposium: Victoria Ainsworth, Toni Roth and Jessica Vadas.

I am also appreciative of the strong group that's paved the way and supports me at NYU.

Slide 4.14: References

Finally, I present the full references for the papers I spoke about in this talk. I am looking forward to the Q&A!

Listed References:

Presentation 4:

- Banerjee SC, Walters CB, Staley JM, Alexander K, Parker PA. Knowledge, Beliefs, and Communication Behavior of Oncology Health-care Providers (HCPs) regarding Lesbian, Gay, Bisexual, and Transgender (LGBT) Patient Health care. *J Health Commun.* 2018;23(4):329-339. doi: 10.1080/10810730.2018.1443527. Epub 2018 Mar 9. PMID: 29521575; PMCID: PMC5961501.
- Dimant OE, Cook TE, Greene RE, Radix AE. Experiences of Transgender and Gender Nonbinary Medical Students and Physicians. *Transgend Health.* 2019 Sep 23;4(1):209-216. doi: 10.1089/trgh.2019.0021. PMID: 31552292; PMCID: PMC6757240.
- Greenwood BN, Hardeman RR, Huang L, Sojourner A. Physician-patient racial concordance and disparities in birthing mortality for newborns. *Proc Natl Acad Sci U S A.* 2020 Sep 1;117(35):21194-21200. doi: 10.1073/pnas.1913405117. Epub 2020 Aug 17. PMID: 32817561; PMCID: PMC7474610.
- Griggs J, Maingi S, Blinder V, et al. (2017). American Society of Clinical Oncology Position Statement: Strategies for Reducing Cancer Health Disparities Among Sexual and Gender Minority Populations. *Obstetrical & Gynecological Survey.* 72. 598-599. 10.1097/01.ogx.0000524472.14033.3f
- Hebl MR, Foster JB, Mannix LM, Dovidio JF. Formal and Interpersonal Discrimination: A Field Study of Bias Toward Homosexual Applicants. *Personality and Social Psychology Bulletin.* 2002;28(6):815-825. doi:10.1177/0146167202289010.
- O'Brien KR, McAbee ST, Hebl MR, Rodgers JR. The Impact of Interpersonal Discrimination and Stress on Health and Performance for Early Career STEM Academicians. *Front Psychol.* 2016 Apr 28;7:615. doi: 10.3389/fpsyg.2016.00615. PMID: 27199848; PMCID: PMC4849428.
- Samuels EA, Boatright DH, Wong AH, Cramer LD, Desai MM, Solotke MT, Latimore D, Gross CP. Association Between Sexual Orientation, Mistreatment, and Burnout Among US Medical Students. *JAMA Netw Open.* 2021 Feb 1;4(2):e2036136. doi: 10.1001/jamanetworkopen.2020.36136. PMID: 33528552; PMCID: PMC7856540.
- Quinn, Gwendolyn & Alpert, Ash & Sutter, Megan & Schabath, Matthew. (2020). What Oncologists Should Know About Treating Sexual and Gender Minority Patients With Cancer. *JCO Oncology Practice.* 16. 309-316. 10.1200/OP.20.00036.