



"Close Up Shot of Human Hands" by Arturo A via Pexels.com

## Introduction

Through the years, mental health professionals have recognized the ubiquity of trauma including trauma that is caused by psychiatric hospitalization.<sup>1,2</sup> Trauma-informed models have been created to recognize and validate patients' traumatic backgrounds and to reduce the amount of trauma that they experience while receiving care.<sup>3</sup> These models mainly focus on patient-provider relationships and do not primarily address the patient-patient relationship.

Pulling from previous trauma-informed methodology, a set of five principles are proposed to foster interpersonal community amongst patients within acute adult inpatient psychiatric units. These principles are also meant to help stifle the cycle of historical forgetfulness of addressing and treating trauma.<sup>1</sup> The goal of these five principles is to make acute psychiatric units a safer space for all individuals, especially patients. It is important to make seeking treatment for mental health more accessible and welcoming for those who need it.

## Contact

Email: [brianna.mays@temple.edu](mailto:brianna.mays@temple.edu)



Left: "Sportsmen playing basketball on modern sports court" by Andrea Piacquadio via Pexels.com



Middle: "Group of People in a Group Therapy" by Tima Miroshnichenko via Pexels.com



Right: "Women Doing Planting Together" by cottonbro studio via Pexels.com

From left to right: recreational sports, peer support groups, gardening

## The Five Trauma-Informed Principles

- Fostering a sense of community within the patient population via thorough orientation and community meetings<sup>4</sup>
- Rethinking the physical space to reduce patient stress and therefore patient aggression via features including single rooms, nature, adjustability, and recreation<sup>4,5</sup>
- Providing a mentorship program led by peer mentors from the community<sup>4,6</sup>
- Providing better mental health education and awareness within society via social media<sup>7</sup>
- Bridging the gap between the community and inpatient psychiatry through education, advocacy, and collaboration<sup>8</sup>



Left: "Waterfall in rocky ravine on painted picture" by Shahram jahansooz via Pexels.com



Right: "Pink and Purple Wallpaper" by Zaksheuskaya via Pexels.com

## Limitations and Future Considerations

Implementation of these principles requires patience, financial investment as well as an overhaul of how mental health is perceived and how treatment is carried out. Social media content creation places an additional task on physicians' lists of to-dos, which can contribute to physician burnout. The help of individuals with mental illness in spreading awareness and mental health education via social media is greatly appreciated, but this obligation should not be forced upon them as it is not their duty to educate the masses. Also, it is important to acknowledge the role of conventional media in spreading false beliefs about mental health. There must continue to be a call out against the conventional media's impact on mental health representation in pop culture.

Efforts to redesign the physical space can be financially challenging and labor-intensive due to the additional need for materials, training, and staff. This can be particularly challenging for under-resourced programs. Moreover, the medical system's adoption of corporate ideals pushes health systems to reduce expenses and prevent "overspending"<sup>9,10</sup>. Consequently, this results in fewer hired staff and a limit on realistic design changes that can be accomplished in acute psychiatric units. However, institutions should not forfeit efforts to improve acute adult inpatient units to help reduce aggression and create environments that will bolster interpersonal relationships between patients.<sup>10</sup>

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## Introduction

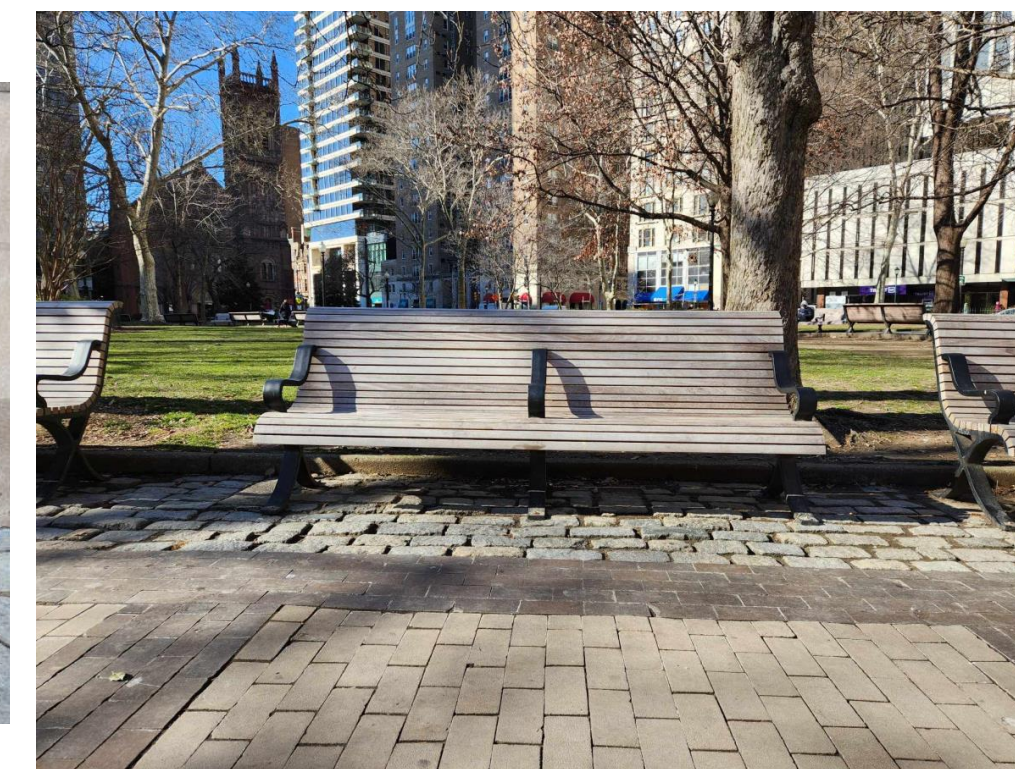
Hostile architecture is a passive design phenomenon in cities used to discourage the public presence of the unhoused population. It has also been referred to as 'hostile design,' 'defensive architecture,' and 'anti-homeless design'.<sup>1</sup>

Hostile architecture exists within a larger web of anti-homeless laws and regulations popularized by neoliberal governments as broader social welfare programs that support this vulnerable population are abandoned in favor of strategies that seek to cut costs, a process known as "organized abandonment."<sup>2</sup>

Little is known about the exact relationship between hostile architecture and homeless individuals; qualitative and quantitative data is sparse. It is the position of this thesis that hostile architecture likely worsens the health disparities experienced by this population. Utilizing several ethical frameworks, including the tools of urban bioethics, these design features are likely unethical.

## Contact

Brendan.mccreath@tuhs.temple.edu



## Philadelphia Case Study

Examples can be found in any city, including Philadelphia. Benches throughout the city have metal dividers to prevent horizontal sleeping (top center). Waste containers are built to be prohibitive of garbage picking (top left). The walls of a convenience store in Rittenhouse Square are slanted to prevent anyone from leaning on them (bottom center).

## Homeless Health

Death remains an ever-present threat to the unhoused population. Common chronic conditions are all the more common and uncontrollable. Substance use and mental illness are prominent. Infectious diseases and environmental



exposures also present unique health concerns for this population. Hostile architecture may influence health outcomes by relocating individuals to places at higher risk for infectious disease, more prone to physical harm, or more isolating from pedestrians who may be able to help in the event of a drug overdose or other health emergency.

## In Philadelphia:

- Roughly 4,762 sheltered people are experiencing homeless, 973 are completely unhoused<sup>3</sup>
- Homeless individuals have a mortality rate 3.5 times higher annually than their housed neighbors, adjusted for age<sup>4</sup>
- Their average death age was 49 years old<sup>5</sup>

## Ethical Considerations

- If data can support that hostile architecture negatively impacts health outcomes, a consequentialist argument can be used against it
- Hostile architecture likely violates the bioethical principles of autonomy and justice
- A deontological argument can also be used given the overall lack of input from the homeless community regarding the use of these structures

## Future Directions

- Further research is needed to establish the relationship between hostile architecture and health
- Urban bioethics is well poised to enter the discussion of hostile architecture use and implementation
- Advocacy on the local and national scale is needed to support this vulnerable population and improve their conditions

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### Introduction

Lung cancer remains the leading cause of cancer death in the US.

Lung cancer screening (LCS) with LDCT has been found to reduce lung cancer mortality up to 26% and all cause mortality by 7%.

LCS registry has found low rates of LCS with 1.9% who qualified that underwent screening.

LCS rates are lower in minority populations, specifically in African Americans (AA) even though they benefit more from LCS than others.

It is largely unknown what role social determinants of health play in LCS.

### Contact

tul42965@temple.edu

### Methods

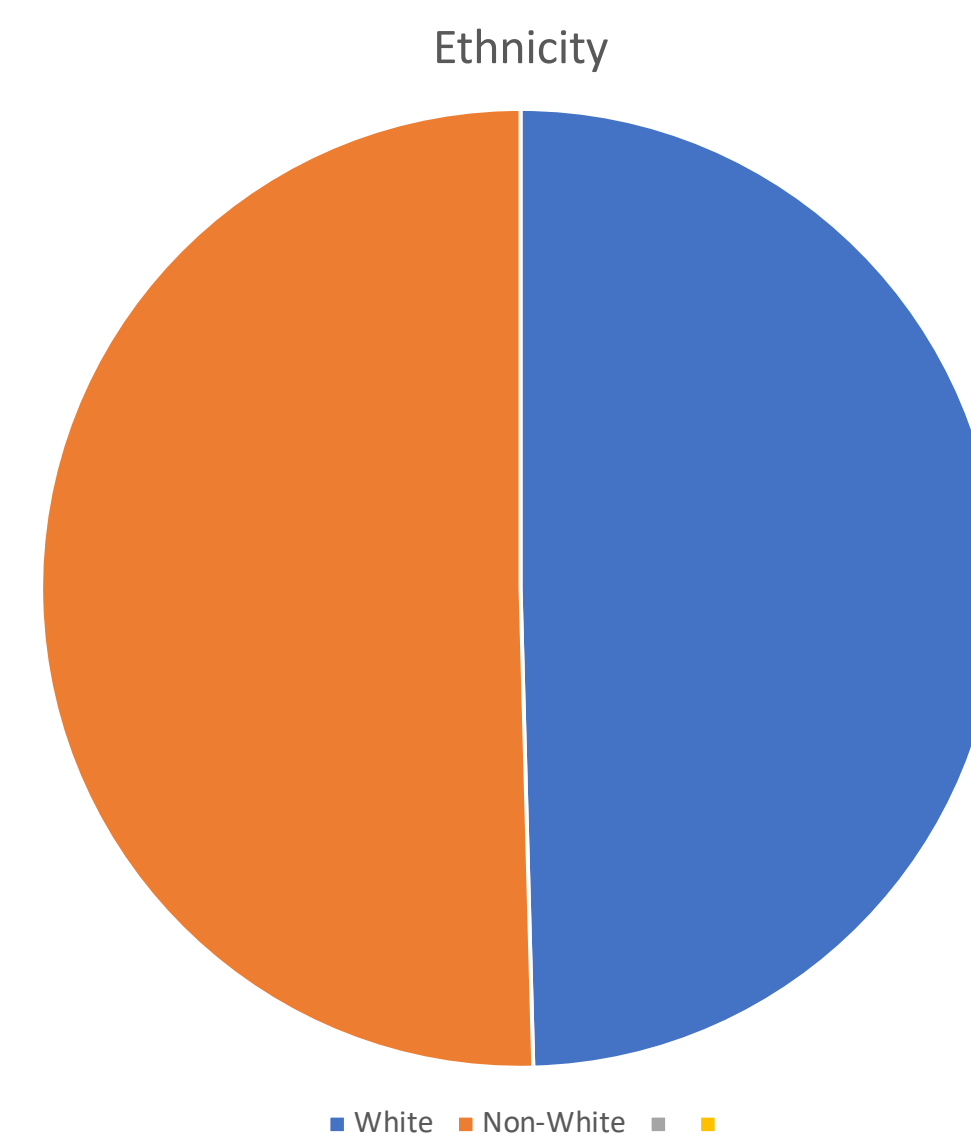
LCS-qualifying patients were recruited to join the study from the Temple Lung Center.

Participants filled out a questionnaire collecting demographic and social determinants of health information.

236 patients were recruited and consented, with 188 patients completing the full survey. White category consists of 117 individuals and Non-white category consists of 119 individuals. Among the Non-white category, 95 (79.8%) are Black.

The survey asked about Social Support, Neighborhood Cohesion, Transportation, Perceived Racial Discrimination, Patient Physician Relationship (PPR), attitudes toward screening and care costs. These were assessed with a Likert scale out of 5.

Access to transportation and Perception of LDCT Cost and Care were assessed with one "Yes" or "No" question.



### Results

#### Cost Concerns

54.4% reported concern about cost of screening (33.7% strongly agreed and 20.7% agreed).

48.4% reported concern about cost of potential care (21.8% strongly agreed and 26.6% agreed).

#### Transportation

13.3% report difficulties in attending appointments.

Females were found to report more difficulty attending appointments compared to men (18.4% vs 7.1%,  $p=0.024$ ).

Non-white were found to report more difficulty attending appointments compared to white individuals (22.2% vs 6.5%,  $p=0.002$ ).

#### Patient Provider Relationship

The average score for trust in the physician was at 4.38/5 and for comfortability in the physician was at 4.38/5. Both non-white and white reported similar levels of comfortability in physicians (4.51/5 vs. 4.26/5,  $p=0.007$ ).

#### Racial Discrimination in Healthcare

The average score for racial discrimination in healthcare was 1.37 with similar levels reported between non-white and white individuals (1.53/5 vs. 1.24/5,  $p=0.0004$ ). 47.6% of non-white individuals report that their race has been generally discriminated by the healthcare system.

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### Introduction

- 1963: the first SP program was founded at the University of Southern California from student advocacy
- 1999: LKSOM established the SP program under the guidance of the William Maul Measey Institute for Clinical Simulation and Patient Safety.
- While 187 of 195 medical schools have adopted this model, research indicates that SPs are biased – specifically with the DPI, a subjective assessment of the student’s interpersonal skills.
- This study aimed to uncover the attitudes towards the SP program from the perspective of both SPs and students. Additionally, this study examines recruitment and training practices, methods of standardization, and the OSCE to identify potential biases and grievances within the SP program.

### Methods

14 medical students, 9 SPs and 1 faculty member were interviewed. Interviews were transcribed and coded for major themes, drawing from concepts outlined by Saldana et al.

SP Demographics

Category	No. (%)
<b>Gender Identity</b>	
Female	4 (44)
Male	4 (44)
Non-binary	1 (12)
<b>Race</b>	
Asian/Pacific Islander	2 (22)
Black/African American	1 (11)
White/Caucasian	6 (67)
Other	0 (0)
<b>Ethnicity</b>	
Hispanic/Latino	0 (0)
Non-Hispanic/Latino	8 (89)
Other	1 (11)

Student Demographics

Category	No. (%)
<b>Gender Identity</b>	
Female	10 (71)
Male	3 (22)
Non-binary	1 (12)
<b>Race</b>	
Asian/Pacific Islander	5 (36)
Black/African American	5 (36)
White/Caucasian	3 (21)
Other	1 (7)
<b>Ethnicity</b>	
Hispanic/Latino	3 (21)
Non-Hispanic/Latino	11 (79)
Other	0 (0)

### SP Sentiments



### Quotes

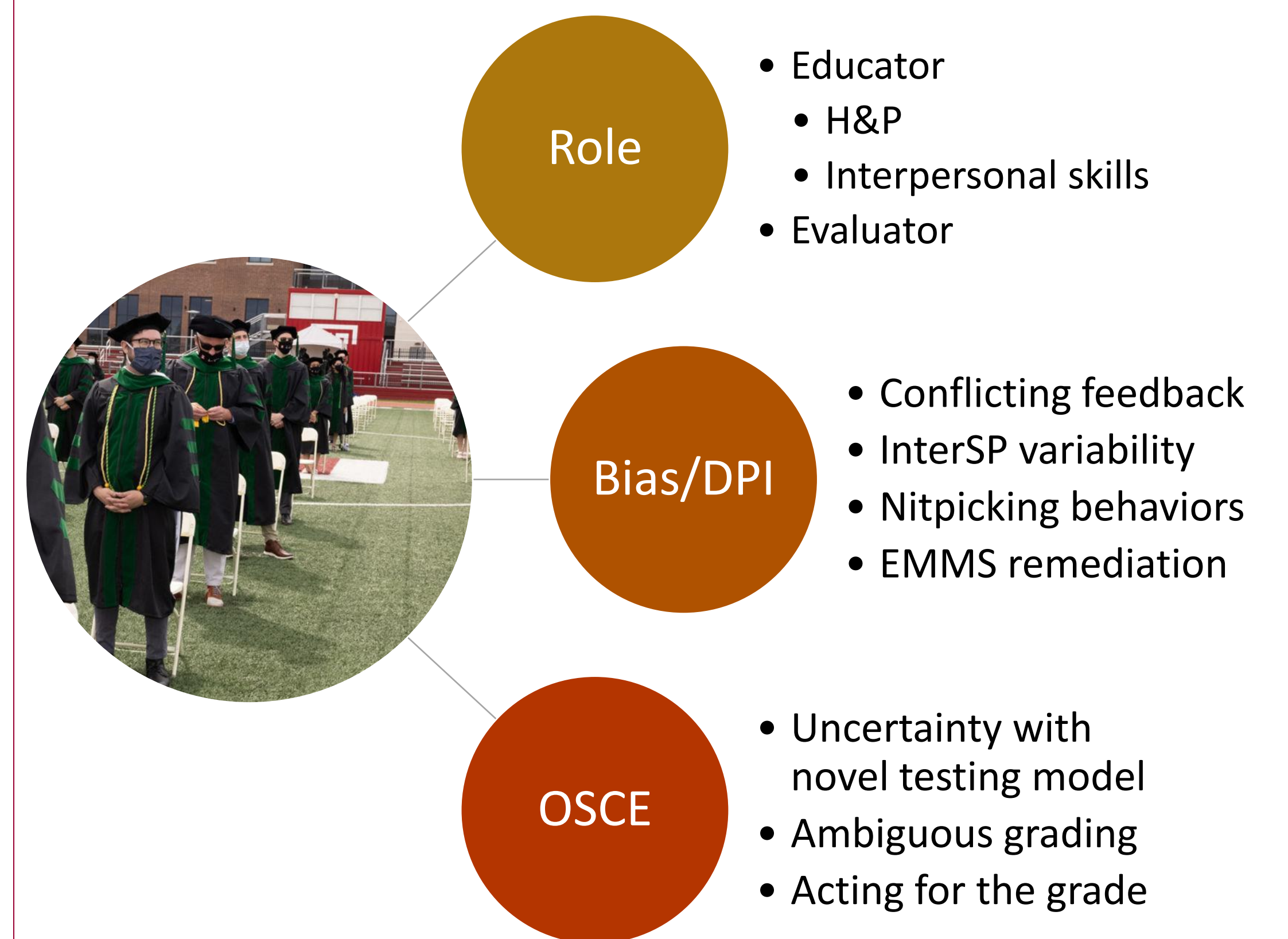
#### SP on the nuances of evaluation

...what you're training these people to do is difficult. Because it's both hard and fast. Did they do maneuver A? Did they ask this question...But then there's also the amorphous part of it, which is did they conduct the interview in a way that allowed for some rapport to happen? You know, what's the line between a shared joke that brings rapport versus a shared joke that makes the patient uncomfortable? You know, and it's contextual, and it's weird...there's the real specific things you're trying to teach that you can also checklist and then there's the other parts that are a lot harder to quantify.

#### Student on DPI

...if I was like talking to a patient normally, and they said something, let's just say outrageous. And I'll be like, "You lying?" If I said that to an SP, they'll be like, "Oh my god, You can't say that to a patient!" But I feel like if I was talking to like a black patient, or like, I don't know, a mixed or POC patient, they would understand what I mean more than just like, you know, these kinds of things...I change the way I speak a lot when I'm interacting with SPs.

### Student Sentiments



#### Student on general sentiments of the SP program

I think that the SPs that I've worked with, they've always given me pretty good advice. And it always does seem like...they're like thinking carefully about what they can do to improve how I am or how I'm interacting with them...and I feel like they do a great job of balancing like helpful criticisms with...praise for what you do right.

### Past, Present, Future

- LKSOM has a duty to promote equity, equality and justice
- Perfect standardization and unbiased examination is impossible
- Reducing DPI weight vs simplifying DPI checklist vs removing DPI grading
- Access to OSCE rubrics at the inception of medical education
- Future research on SP bias and standardization methods and outcomes



“Over half of the country speaks Spanish, and we're going to have to do it. And I think that should be reflected in the curriculum”

## Introduction

- With the growing immigrant population in the United States, the number of those whose primary language is not English continues to rise.
- Limited English Proficiency (LEP) is a label for those who cannot read, write, or speak English at a level that permits effective interaction with healthcare providers.
- Language barriers can directly impact many aspects of their life, including their healthcare experience, with LEP patients often having worse healthcare access, lower patient satisfaction, and poorer clinical outcomes.
- Therefore, interpreters are an integral tool in the equity of LEP patient healthcare.
- Medical education can significantly change how future physicians interact with LEP patients; however, a uniform curriculum has yet to be created to target student training efficiently.
- Prior literature explains that physicians who received training on cultural competence and the proper use of medical interpreters were likelier to utilize LEP services in the hospital.
- Given the significant impact this can have on patient care, I wanted to hear directly from medical students about how their medical education was training them to use services for LEP patients.

“We shifted when we had COVID and now telehealth is part of our OSCEs. So, I don't see how adding an interpreter portion wouldn't be another shift to reflect what's happening in our world”

## Methods

- Underwent an IRB review after I submitted the necessary documentation, which in September 2023 they determined that the proposed activity was not research involving human subjects as defined by DHHS or FDA regulations.
- Participant recruitment (class 2024-2027) was done by distributing flyers around the medical education building explaining the research project with a QR code for students to express interest.
- Three focus groups were held virtually, recorded, and transcribed verbatim by Otter AI software.
- I then conducted a qualitative data analysis, de-identified participants and reviewed each transcript to find themes expressed by participants.
- All participants received a compensation of a \$15 gift card.

## Results

Demographics		
<b>Gender</b>	<b>N</b>	<b>% total</b>
Male	23	88
Female	3	12
<b>Grade</b>	<b>N</b>	<b>% total</b>
M1	2	7.7
M2	5	19.2
M3	9	34.6
M4	10	38.5

- THEME #1** students felt that interpreters were integral to culturally competent care
- THEME #2** students who speak another language have the undue burden of interpreting even when not comfortable doing so
- THEME #3** students felt that there was not enough training in medical school regarding various types of interpreters, how to reach them or how to use them properly
- THEME #4** students are open to doctoring sessions or simulations with non-English speaking standardized patients and interpreters
- THEME #5** the final theme was that there mixed feelings amongst students regarding the desire to have OSCEs with non-English speaking standardized patients and interpreters.

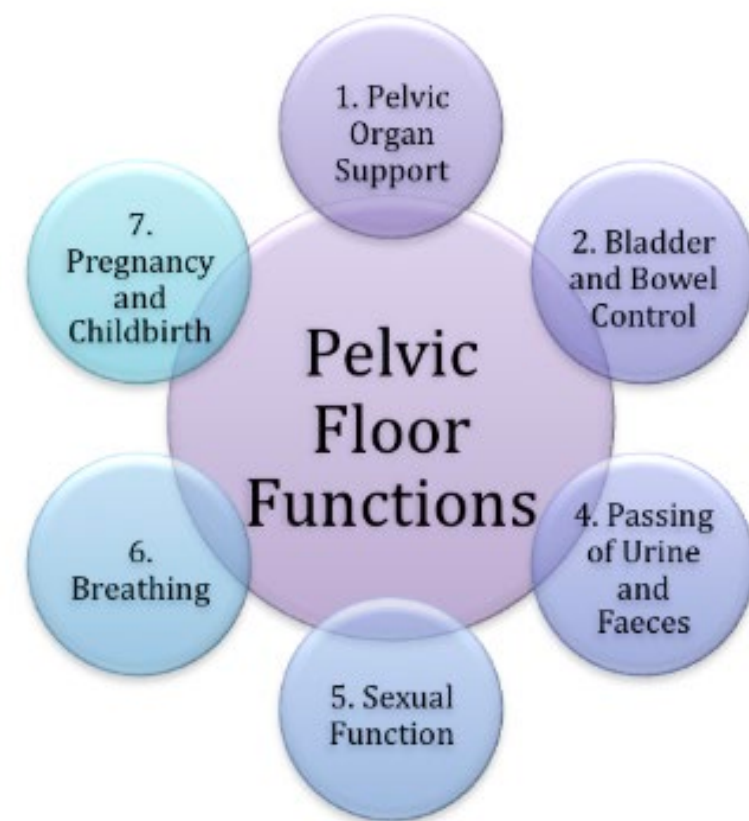
## Discussion & Conclusion

- Future physicians deserve training that empowers them to treat their patients with cultural competence.
- Part of that involves being able to communicate with their patients, which often requires an interpreter due to the large non-English speaking patient population in the United States.
- With that in mind, medical education can significantly change how future physicians interact with LEP patients by providing appropriate education on interpreter services either through doctoring sessions or OSCEs.
- Meanwhile this would lower the burden placed on multilingual students who are inappropriately often used as interpreters.
- Medical education has the chance to directly impact LEP patient’s outcomes by ensuring that students not only understand the importance of using interpreters in providing culturally competent care when treating their LEP patients but also by adequately training them on how to do so.
- Taking time in the curriculum to address these student concerns can make the transition to the clinical years more straightforward.
- With students feeling unprepared to tackle their interactions with LEP patients, the question becomes what is the best way to address this and effectively impact student learning.
- These findings leave room for future research exploring a more concise response to which instruction methodology students preferred between doctoring sessions or through OSCEs, given the mixed feelings amongst students.

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## Introduction

- Urogynecology is a field within Obstetrics and Gynecology that treats incontinence, bladder pain, pelvic floor pain, pelvic floor prolapse
- 2/3 of women greater than or equal to 50 years old in the U.S will experience urinary incontinence (1)
- Prolapse is the 3<sup>rd</sup> highest indication for hysterectomy (removal of the uterus) in the U.S and urethral mesh slings is a common procedure performed for stress incontinence with more than 338,000 surgeries annually in the U.S. (2)
- Treatment for incontinence includes lifestyle intervention, medication and surgery
- Treatment for prolapse includes pelvic floor physical therapy, pessary (Figure 1,2) and surgery
- Prolapse and incontinence significantly affect quality of life and is associated with significant mental health outcomes and the severity of depression symptoms are higher among black women. (3)
- Only 25% of women with incontinence seek care (4)

## Contact

[tua00361@temple.edu](mailto:tua00361@temple.edu)

## Analysis

- Provider related factors in accessing care included underestimation of the prevalence of incontinence and prolapse, decreased screening, little knowledge about urogynecology and access to subspecialists at their respective hospitals (4,5).
- Patient related factors in accessing care included lack of knowledge regarding urinary incontinence and prolapse, with White women having improved knowledge over non-White women, cultural differences and expectations, as well as language barriers (4, 6, 7, 8).
- Policy and structural related factors in accessing care included lack of insurance coverage, specifically immigrants and those of non-White race, difference in coverage for specific medication treatments, difference in recommendations for patients by race, poor health education and societal messages regarding incontinence as “normal part of aging.” (8, 9, 10,11)



Figure 1: Various Types of Pessaries  
(A) Ring, (B) Shatz, (C) Gellhorn, (D) Gellhorn, (E) Ring with support, (F) Gellhorn, (G) Risser, (H) Smith, (I) Tandem cube, (J) Cube, (K) Hodge with knob, (L) Hodge, (M) Gehrung, (N) Incontinence dish with support, (O) Donut, (P) Incontinence ring, (Q) Incontinence dish, (R) Hodge with support, (S) Inflatoball (latex) (Viera & Larkins-Pettigrew. Figure 1, May 2000)

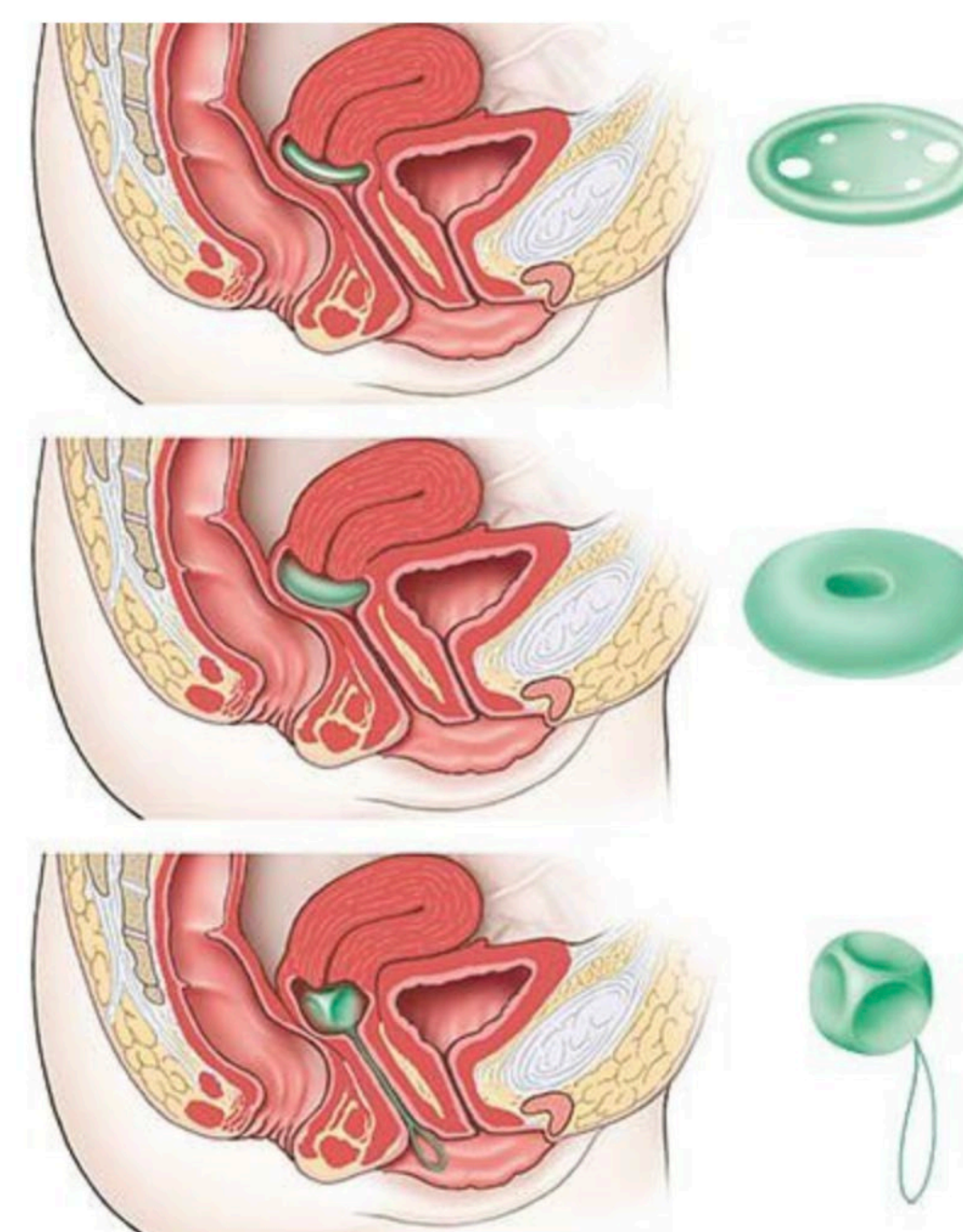


Figure 2: How to insert a pessary  
From top to bottom: Ring pessary with support, Ring pessary, Cube pessary (informedhealth.org, 2021)

## Conclusion

- Primary care providers and gynecologists have a responsibility to screen everyone for urinary incontinence and prolapse to decrease an initial barrier in accessing possible treatment options
- More intervention can be done at a patient care level, such as placing posters in waiting areas so that patients can initiate a conversation about incontinence and prolapse (12)
- We must create a culture where discussing incontinence and prolapse is not taboo and is culturally accepted so patients feel comfortable discussing these problems with their provider, this can start at a community level by engaging and encouraging people to talk to each other about these issues
- We must allow space to hear a patient and truly empathize with them to understand what it means to live day in and day out with incontinence and the quality of life they live
- Effort must be made by the provider and healthcare system to make access easier with accessibility to transportation, insurance, interpreters, and for those who are disabled appropriate equipment

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## Introduction

Opioid use in pregnancy is the latest in a long list of social issues in the United States that is being addressed with punitive policies that disproportionately affect women of color and their families and do not focus on environmental factors contributing to increasing drug use in pregnancy. Evidence is emerging demonstrating that these punitive policies are not achieving their intended goals. Additionally, these policies continue a trend of pitting maternal and fetal interests against each other. Historically, bioethics has divided conversations on biomedical and environmental ethics. However, recent merging of these fields may facilitate the biopolitical translation of emerging epigenetics research of substance use in pregnancy. This paper reviews the ineffectiveness of punitive policies in reducing drug use in pregnancy and related negative health outcomes for both mothers and infants. It demonstrates how these policies perpetuate racial injustice through existing systemic oppressive structures. Leveraging epigenetics to draw a link between the environment and the maternal-fetal dyad can help members of the scientific community advocate for policies that promote equitable and justice-based public health interventions as well as relieve the maternal fetal conflict.

## Contact

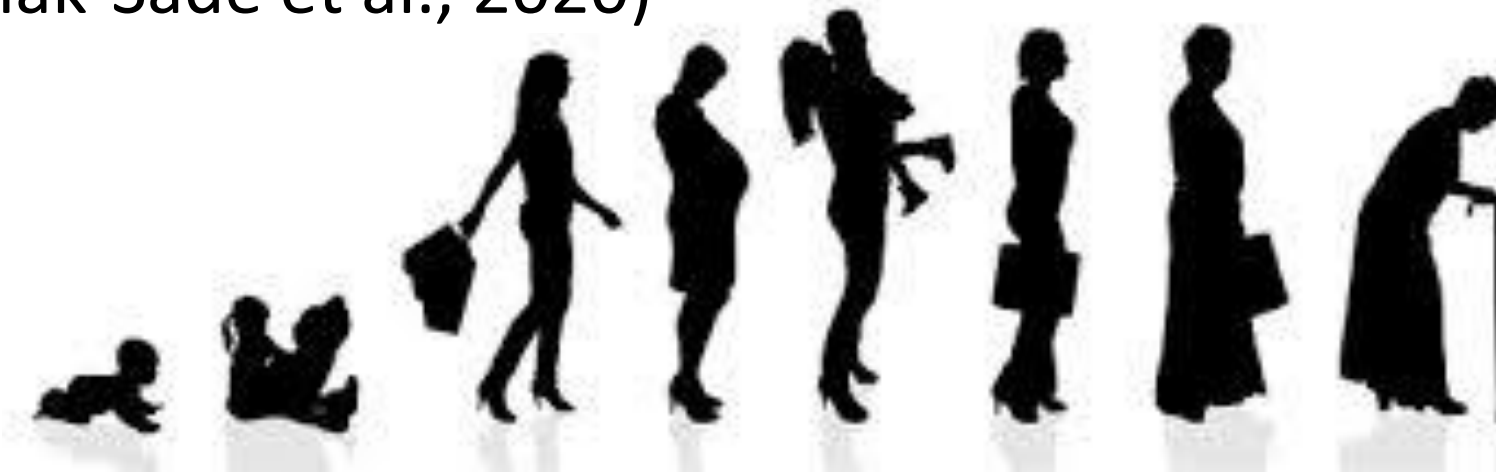
[tum96846@temple.edu](mailto:tum96846@temple.edu)

## Response to drug use in pregnancy

- The opioid epidemic has shifted from a White, rural/suburban epidemic to one affecting urban communities of color with drug overdose rates among minority groups exceeding those of Whites from 2020-21 (Gramlich, 2022; Spencer et al., 2022b)
- Existing racist infrastructures such as the child welfare system and criminal justice system are used to address drug use in pregnancy with 24 states and D.C. employing policies that considered opioid use in pregnancy to be child abuse or neglect (McCOURT et al., 2022)
- These policies have failed to reduce opioid use in pregnancy and rates of neonatal abstinence syndrome at times deterring pregnant women from seeking treatment or leading to parent-child separation (Atkins & Durrance, 2020; Faherty et al., 2019)

## Environment and the epigenome

- Epigenetic changes are dynamic, reversible changes that alter gene expression, primarily occurring during development in utero. Additionally, they are heritable change that may persist throughout a lifetime and between generations.
- Exposures to external factors such as teratogens including illegal substances, food scarcity, and stressful life events, such as family separation, all influence the epigenome and potentially impact short and long-term health outcomes
- Exposure to these conditions and harmful substances are often influenced by race, socioeconomic status, and degree of racial segregation in a specified area (Bower et al., 2014; Yitshak-Sade et al., 2020)



## Epigenetics for equitable solutions

- Epigenetics can be used by the scientific and medical community to demonstrate the link between substance use in pregnancy and the effects on the fetus and mother, and the environment to which pregnant women are exposed and, through that, call for public health interventions that address structural inequalities
- Demonstrating how epigenetic changes persist between generations can help strengthen the idea of a maternal-fetal dyad and the importance of a holistic approach to opioid use in pregnancy that addresses structural inequalities



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