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Contents

Mission

The Journal of Nursing Doctoral Students Scholarship (JNDSS) is a scholarly publication dedicated to the development of nursing doctoral student scholarship and the advancement of nursing science. This journal is peer reviewed by doctoral students, edited by doctoral students and targeted towards health practitioners, educators, scientists and students. This journal has both a professional and an educational mission. First, to serve the profession, each issue features articles that represent diverse ideas, spark intellectual curiosity, and challenge existing paradigms. Doctoral students will have an opportunity to explore and analyze issues and ideas that shape healthcare, the nursing profession and research around the world. Second, to fulfill its educational mission, doctoral students will be trained in the editorial and administrative tasks associated with the journal's publication and assisted in preparing original manuscripts for professional publication. This journal will be evidence of the scholarly development of nurse scientists.

Editor-in-Chief
Ellen Munsterman, MSN, APRN, AGCNS-BC

Ellen Munsterman is a PhD student at the University of Pennsylvania in the School of Nursing. She is also pursuing a dual degree in the Masters in Bioethics (MBE) program. She is a predoctoral fellow in the NewCourtland Center for Transitions and Health and a scholar in the Penn Memory Center Christopher M. Clark Scholars Program. Ellen received her BSN and her MSN as an Adult/Gerontological Clinical Nurse Specialist from Texas Christian University. Clinically, Ellen worked as a medical/surgical RN and then as a CNS and coordinator of the Nurses Improving Care of Healthsystem Elders (NICHE) program at a hospital in Fort Worth, Texas. Ellen's research interests are focused on the hospital care of older adults with dementia.

Editorial Board

Acknowledgements

JNDSS: A Decade of Student Scholarship

Ellen Munsterman, MSN, APRN, AGCNS-BC
Editor-in-Chief

This issue marks ten years since the inaugural issue of the Journal of Nursing Doctoral Students Scholarship was published. So, for this year's editorial, I met with Drs. Topaz, Sefcik and Joseph, the inaugural editors of JNDSS, to hear from them about their experience getting JNDSS off the ground and their thoughts on writing and publishing more broadly.

This interview has been edited for length and clarity.

Ellen Munsterman (EM): Can you start by telling me about the origin of the journal? What factors contributed to its development?

Dr. Maxim Topaz (MT): In the journey of a PhD student, a significant amount of time is invested in various forms of writing. While much of this work is of high quality, it often does not align with the conventional formats required for peer-reviewed journal publications. Traditional scientific journals predominantly focus on disseminating original research, literature reviews, or perspectives that examine theoretical frameworks. However, the work conducted by PhD students has its own intrinsic value, even if it does not conform to these established formats. This realization led us to consider alternative avenues for scholarly communication.

Dr. Justine Sefcik (JS): I think that several people from our cohort presented this idea to me and Max, and then Max and I, in our leadership roles [Co-Chairs of the Doctoral Student Organization at the School of Nursing], continued to discuss it and talk to faculty, to essentially figure out how to make it happen. Not even if it's feasible. It was like, okay, how are we going to make it happen?

Dr. Paule Joseph (PJ): Yes, and we got a lot of support from several of the Penn Nursing faculty, from the Dean Afaf [Meleis] at the time. Right?

MT: Yes. We consulted with several people who were either editors of a journal or on an editorial board at the school of nursing specifically, like Barbara Riegel.

JS: Yeah, Pamela Cacchione we talked to. She was a journal editor at the time. I think whoever we talked to, we ended up putting an acknowledgment in that first journal. There were quite a few. We made the rounds to get as much advice as we could…I think the other thing, in terms of this idea is, we really did have a lot of support from people in our cohort that came with us to these meetings. So, it was beyond just this tiny group who wanted to see it happen. There was a large group of people who were really interested in seeing this journal come to fruition.

EM: What were some of the biggest challenges you encountered during the development process?

PJ: For many people, even in our cohorts, it was their first experience reviewing for a journal. So, by the time they reviewed for a journal [after JNDSS], they had some experience. The comments were so good, the reviews were so good. So, it was really bringing peer review to life from the classroom to an actual tangible product. And it was also nice to see a paper that probably would have not seen the light of day, printed. The reviews and comments improved many of the manuscripts. So, it was very motivating for us and a lot of people. We received a lot of positive feedback.

JS: That being said, we were still seeking high quality papers. I remember even reading a paper and saying, "Oh no, we're going to have to reject it." And you know that in some ways that is a challenge because people are thinking, "Oh, this is a student journal, I'm automatically going to get my paper accepted." But we definitely had to reject some of the papers that we received.

MT: We really paid attention to the review comments, just like Paule mentioned; those reviews were invaluable. But let's be honest, we were all newcomers to this process. That's why it was crucial for us to develop clear, straightforward guidelines for conducting reviews. I wouldn't be surprised if some of those initial guidelines are still in use today, perhaps with a few updates. How much has really changed, would you say?

JS: Yeah, that's true. So, we had directions for reviewers, and then I am remembering now too, we had somebody more senior review all the papers as well. So, we had some faculty, and also doctoral students that were just about to graduate, just to make sure that we were having a more rigorous process. I don't know if that continued on, but I think we did that the first year as we were moving this journal forward.

EM: Yeah, that's interesting. We don't have a process of having faculty reviewing the papers, but we do put out the call, you know, for reviewers to all the same people that get the call to submit manuscripts. So, some of the reviewers are students here at Penn, and then some, you know, are students from other universities, all at different levels in their in their doctoral training. I do think the reviewer instructions have been modified, but still definitely some elements still remain from the version that you guys that you guys sent out.

EM: You definitely provided a really solid foundation, you know, for it to move forward. So, on that note, then how did you envision that JNDSS would grow, and what were your hopes for the future of the journal?

MT: We did think about that, or at least I did personally. I did think that it was going to grow and develop, you know, and hopefully stay as it did, in business. There was thinking about like indexing, in PubMed or another search engine or database. So, you know, that is what I recall.

JS: Yeah, that is what I remember. That was the big goal. I think our first goal was to get it published in a more local area, and then start expanding by year two for a bigger outreach, hoping maybe to even have international submissions. And then, that super big goal was can this journal eventually be indexed?

EM: That's great! Our editor from last year, Helena [Addison], has started the process that we're going to continue with of having [the journal] on the UPenn Scholarly Commons, so it will be searchable in that way. And then after last year's issue and this year's issue, our goal will be to work backwards and get all the past issues added to the commons, so then it'll all be there.

EM: Why do you think it is important to have a journal that specifically highlights the work of current doctoral students?

JS: Max touched on that a bit when we started this conversation, but sometimes as students you're writing papers that are really important, but they don't necessarily fit what other journals are looking for, and so this could be a home for doctoral students to have experience publishing; not only having their paper published but then also having other students do some of that editorial work of running the journal, of peer review practice, the leadership skills of how do we get this published? And so forth.

MT: I'm in complete agreement with Justine on why this initiative continues to be relevant today. The landscape of academic publishing has evolved considerably over the past decade, with more resources and platforms at our disposal. We now have easier access to archives and pre-print servers, and the internet has opened up various avenues for disseminating our work. However, the experience gained from reviewing articles and participating in the peer-review process—as Justine highlighted—still holds significant value. Additionally, the types of articles we focus on remain pertinent, particularly because many traditional journals have yet to accommodate these formats.

EM: In your opinion, what are the biggest challenges to dissemination, currently or that you anticipate in the near future? What opportunities do you see for addressing these challenges?

JS: The peer review process – our papers are stuck now for months and months and months. It has gotten worse since [the pandemic] and I was just telling my peers the other day that I have five papers that have been under review for many months, and I don't have any publications yet this year but it's because all these papers are just sitting there. Then you write to the editors, and they say, "Oh, it's still under review." So, the peer review process has really slowed down, which is then causing a backlog in the dissemination of our research and our publications. I know Max mentioned, some places are now trying to pay reviewers. When you talk to journal editors, they say that they used to reach out to maybe six people, and they would get two to three reviewers. Now they're reaching out to 30+ people because

there are so many rejections because people either they don't have the time or the bandwidth to review or, like me, they get so many invitations to review from so many different journals I have to pick and choose who I'm going to review for because I also need to write my own manuscripts. That is a problem right now.

MT: Absolutely, the topic of disseminating scholarly work is certainly timely. There are novel channels for dissemination, such as pre-print servers, which present both opportunities and challenges. While these platforms offer quick exposure, they typically lack the rigor of traditional peer-reviewed journals. This can be problematic. I've noticed, for instance, when reviewing NIH grants that applicants frequently cite these pre-prints. It's somewhat surprising to see major grant proposals—some requesting millions of dollars—base their work on unreviewed articles. These emerging dissemination pathways do introduce complexity, but they don't eliminate the need for traditional peer-reviewed journals. As Justine pointed out, there's a declining willingness among scholars to participate in the review process. I've observed this firsthand as an associate editor; it's becoming increasingly challenging to find willing reviewers. The time lag in traditional publishing is another hurdle, and the alternative options are less than ideal due to the absence of rigorous peer review. So, the challenges in academic dissemination are multiple and layered.

EM: So then, what kind of opportunities do you see potentially for addressing these challenges. Is there a magic bullet for fixing this peer review process the way that it is currently?

JS: Financial incentives for providing peer-review could help.

PJ: I agree with Justine especially after COVID-19 there is reviewer burnout or in one day you receive so many papers to review. It is difficult. You can't say yes to all. You want to give your best to each paper.

MT: That's a compelling point about financial incentives and the overall economic model of academic publishing. It's rather eye-opening to consider that some large publishers, like Elsevier, reportedly operate on profit margins upwards of 40%. This is striking when compared to standard business models that would consider a 5% margin quite successful. It does raise the question of whether there's room to financially reward reviewers for their time and expertise. Another avenue is the concept of open reviews, where your comments and suggestions get published alongside the article. This brings a level of transparency that is commendable, but it also presents its own challenges. For instance, the public nature of this approach might deter reviewers from providing candid or critical feedback, especially when they know their comments will be attributed to them. While it's a step toward acknowledging the reviewer's contribution, it's a double-edged sword that requires careful consideration.

JS: There are a couple of journals I review for that offer continuing education credits after reviewing a paper which I think is a nice incentive. So, you know, maybe journals could think of little incentives like that. Another journal gives 30 or 40 percent off books related to their publishing house. But not all journals do that. I think one thing, as time moves on, is that social media is a great way to disseminate information about your research, which is different from your traditional publishing websites. So, there are still ways to get your information out. But if you are in academia and being evaluated on your publications, they're looking for those peer-reviewed publications in professional journals.

EM: How, if at all, has your role as editor of JNDSS impacted your career?

MT: I think it was a great experience, thinking about some of those issues. For me, it was really helpful starting to think about what it takes to have a journal. I went on from that experience… and then I was on the student editorial board of another journal, for a kind of major journal. And right now, I'm an associate editor for a journal, which is in part thanks to this experience.

JS: I agree. And I'm sure there's a lot of skills that we've learned, and probably the biggest thing is knowing how important peer review is and giving feedback. One of the biggest comments I always get from people is that I give a lot of feedback, but it's also good, solid feedback. I've even won awards from journals for providing peer-review feedback. So, I think all of this contributes to where I am today.

PJ: For me, I think a lot about the process of publishing, and the importance of being engaged in the publishing process not only as an author needing articles to be published, but as reviewer and how my comments can be constructive to the author. The early experience with JNDSS made me have a deeper appreciation for this process. This was really giving us a taste for what it takes and how much work it is. It was a huge responsibility to really make sure that people's work was highlighted in a way that best showcased their product, but also keeping in mind the mission and vision of the journal created by Max and Justine. So, for me, coming after them, it was a little more pressure, I would

say, because they did such a fantastic job that I felt like, okay, I can't mess this up. But also, they were there, mentoring me and provided valuable advice so even on the next product they had input and guidance on how to do this better. So, I learned from things that didn't go well the first time, and we made it work better the following time. I'm sure now it's even better now. I didn't know then the impact that this endeavor would have on me and my career. I love writing and I get excited about every paper submitted and more excited when it is published. What excites me even more these days is to see the excitement of my fellows' faces when their paper is accepted. I am very excited for JNDSS and this huge milestone. We all had great hope for the journal, but I didn't know how well it was doing and that it has reached a decade. So, I'm just very grateful for that opportunity and to have had that so early in my career. And you know now the whole publishing process is second nature.

EM: What advice would you share to current doctoral students, with respect to writing for publication?

JS: I teach a scientific writing course to doctoral students and one of the biggest tips that I have is to do a lot of reading. If you're reading solid, published papers, it's going to help your own writing and if you can be critical of articles and say, "Oh, they didn't do this well," that can also improve your writing. And I would say practice makes it easier. Writing might be hard for people to start, but the more you keep writing, the more papers you get out, the quicker the process becomes. Try to find peers that you could work well with, write well with, who have similar topic areas. I have a good colleague, Darina Petrovsky, we are both in the dementia care space, and we tend to publish a lot together. When you have a peer that you can work with and you can push each other to get papers out, that just makes writing not feel so solo. I also belong to a couple of different writing groups where we jump on Zoom for a couple of hours each meeting. We touch base at the beginning and ask "What are you going to work on? What is your plan?" Then we check in towards the middle and then we check in at the end. Having that carved out writing time and then also a few minutes for social interaction really helps with writing.

PJ: I think Justine said it best, I think having a writing accountability group is important, knowing that you don't have to do it by yourself. Engaging in the process of writing daily, reading is also essential. I mean just not only reading in your discipline but also reading a little bit outside of your discipline, to really get ideas of what to bring into your own science to be more innovative and to know what other ways you can ask questions. Staying humbled and motivated to learn every day. Don't get discouraged. Don't get discouraged if something gets rejected fifteen times. Just take every comment to improve. At first it might be a lot of desk rejections. Just learn from those comments for what to do for the next time. Remember every paper has a home. The one you are battling probably just hasn't found that home yet. It's a process of perseverance. And you need to persevere to write, and to publish. It will come more naturally with experience.

EM: Thank you all for your time and for starting JNDSS and for giving us this great opportunity to continue the journal and to learn, as you said, about the review process and the editorial process and collaboration. We are grateful to have the opportunity now and you all are certainly responsible for that, so thank you so much!

Justine Sefcik was the inaugural co-Editor-in-Chief (w/ Dr. Topaz) of the *Journal of Nursing Doctoral Students Scholarship* (JNDSS). Dr. Sefcik received her PhD from the University of Pennsylvania's School of Nursing and her Masters in Bioethics from the School of Medicine. She completed post-doctoral education at the University of Pennsylvania School of Nursing and Drexel University College of Nursing and Health Professions, where she is currently an assistant professor.

Maxim Topaz was the inaugural co-Editor-in-Chief (w/ Dr. Sefcik) of the JNDSS. Dr. Topaz received his PhD in Nursing Informatics from the University of Pennsylvania's School of Nursing. He completed his post-doctoral education in Health Informatics at Harvard Medical School. Dr. Topaz is currently the Elizabeth Standish Gill Associate Professor of Nursing at Columbia University and serves as an Associate Editor for the *International Journal of Medical Informatics*.

Paule Joseph was the inaugural Editor-Elect of the JNDSS. Dr. Joseph received her PhD from the University of Pennsylvania's School of Nursing. She completed post-doctoral training at the National Institutes of Nursing Research (NINR). Dr. Joseph is currently the Lasker Clinical Research Scholar Tenure Track Clinical Investigator and Chief of the Section of Sensory Science and Metabolism in the Division of Intramural Clinical and Biological Research (DICBR) at the National Institute of Alcohol Abuse and Alcoholism with a joint appointment at the NINR.

Implicit Bias in Nursing Care: A Walker and Avant Concept Analysis

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Abstract
Nurses address pain and suffering in their daily practice; yet, an underlying problem for nurses is the presence of implicit bias. This paper uses the Walker and Avant (2019) Concept Analysis guidelines to analyze the concept of implicit bias in nursing. The concept analysis reviewed 143 articles of which 21 articles met the inclusion criteria for understanding the impact of implicit bias in current nursing practice. Defining attributes, antecedents, consequences, and empirical referents are identified. Example cases are also offered. The concept analysis highlights the concept of implicit bias and the impact upon nursing care.

Key words: Implicit bias, unconscious bias, Level 1 thought, inequitable treatment, stereotypical thoughts

Implicit Bias in Nursing Care: A Walker and Avant Concept Analysis

Nurses as professionals are seen as dependable, honest, and adherent to high ethical standards (Kerr et al., 2022). In their clinical practice, nurses frequently witness acute pain and suffering while providing care and comfort to patients and families (Kellogg, 2020). The American Nurses Association (2015) established in Provision 1 of the Nursing Code of Ethics the statement: "the nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person" (p. 1). Yet, despite the high moral standards espoused by nurses and the ethical standards of the profession, bias significantly influences the practice of nursing (Persaud, 2019). Nurses can evaluate patients in a biased manner based on sexual identity, cognitive level, level of ability, race, age, income, insurance status, and body habitus (The Joint Commission, Division of Health Care Improvement, 2016). In 2018, the American Nurses Association issued a position statement decrying discriminatory practices and demonstrating the impact of unconscious bias on discrimination (ANA Ethics Advisory Board, 2019).

When considering bias, most people think of stereotypical prejudicial treatment of people in a determined negative way; this is known as explicit bias. Explicit bias is a conscious decision to treat people prejudicially based on an assumed belief in the correctness of their action (Persaud, 2019). Acting on explicit bias is not only unethical, but also both professionally and socially unacceptable (ANA Ethics Advisory Board, 2019; Persaud, 2019). While nurses demonstrate low rates of explicit bias (Gatewood et al., 2019), implicit bias is a universal phenomenon distinct from the conscious prejudice and bigotry associated with explicit bias (Tsai & Kesselheim, 2020). A discomforting fact is that a person can hold explicit equalitarian beliefs while still treating others in prejudicial ways as a result of implicit bias (Gatewood et al., 2019). While nurses maintain that equality of all people is a fundamental value (ANA, 2015), unexamined implicit bias may cause these same nurses to act in ways that they do not ethically endorse (Nordell, 2021).

Over the past 10 years, there have been several publications in medicine and nursing on the effects of

implicit bias in clinical care. Research in clinical areas as diverse as the emergency department (Tanabe, 2021; Wolf et al., 2022) and long-term care facilities (Colon-Emeric et al., 2017) has been conducted, as well as research dealing with implicit bias in nursing education (Edwards-Maddox et al., 2022; Ochs, 2023). This paper will utilize the Walker and Avant (2019) concept analysis framework to analyze implicit bias as a phenomenon of interest in nursing science. A review of the use of the concept of implicit bias, the defining attributes, descriptions of cases, description of antecedents and consequences, and the empirical referents will be completed.

Methods: The Walker and Avant (2019) concept analysis framework requires a thorough search of all applications of the concept to usefully inform future research. The OVID, CINAHL, and Google Scholar online databases were searched for nursing studies which defined implicit bias or the associated key words "unconscious bias." Articles for this analysis were limited to nursing-specific publications in academic peer-reviewed journals from the last 10 years (January 2013-January 2023) that were published in the English language. One hundred forty-three articles were initially identified, of which all abstracts were reviewed. Twenty-one articles were retained, including one systematic review of 15 studies (Hall et al., 2015) and one scoping review of 77 studies (Thirsk et al., 2022) focused on differing types of implicit bias. Searches of the nursing literature identified only one concept analysis that pertained to overweight bias, a type of implicit bias, utilizing Rodger's Evolutionary Model for analysis (Hyer & Conner, 2020). Additional literature reviewed for this analysis included dictionaries and seminal works from disciplines outside of nursing.

Concept Analysis
Purpose of Analysis
While many studies have been completed focusing on medical providers and the presence of implicit bias in their practice, the presence of implicit bias in nursing has not been extensively researched (Hall & Carlson, 2016). One purpose of concept analysis is the refining of ambiguous concepts for theoretical study (Walker & Avant, 2019). Future research into the implicit bias held by nurses will be guided by the clearer understanding of what implicit bias is and is not.

Literature Review
Defining Implicit Bias
Oxford University Press (2022a) defines implicit bias as 1) "any unconscious or unacknowledged preference that affects a person's outlook or behavior;" and 2) "an unconscious favoritism towards or prejudice against people of a particular race, gender, or group that influences one's actions or perceptions." Merriam-Webster Dictionary (n.d.) defines implicit bias as "a bias or prejudice that is present but not consciously held or recognized."

The often-substituted term unconscious bias is defined as "in the neutral sense, any personal preference, attitude, or expectation that unconsciously affects a person's outlook or behavior" (Oxford University Press, 2022b). The second definition of unconscious bias mirrors implicit bias as "in the negative sense, unconscious favoritism towards or prejudice against people of a particular race, gender, or group that influences one's actions or perceptions" (Oxford University Press, 2022b).

Uses of the Concept
Implicit bias was first identified through the work of social psychologists (Greenwald & Banaji, 1995). These authors did not at this time use the term implicit bias; instead, they used the term implicit cognition. Per Greenwald and Banaji (1995), "the signature of implicit cognition is that traces of past experience

affect some performance, even though the influential earlier experience is not remembered in the usual sense – that is, it is unavailable to self-report or introspection" (p. 5). These authors created the Implicit Association Test (IAT) (Greenwald et al., 1998), a validated computerized tool designed to identify implicit behaviors and attitudes through measurement of group-trait associations of those respondents taking the test (Greenwald & Krieger, 2006). Much of the research into implicit bias relies on IAT and its predictive validity.

In nursing, Stamps (2021) interchangeably uses the terms unconscious bias and implicit bias to indicate biases operating "outside of a person's awareness and can be in direct contradiction to a person's beliefs and values" (p. 630). In contrast to explicit bias, an intentional conduct of bias towards an individual, implicit biases are often learned behaviors or mental shortcuts based on past experiences with groups of people (Stamps, 2021). While explicit bias is historically regarded as deviant, implicit bias is more of an unconscious judgment which is not based in intentional prejudice (Stamps, 2021). Thus, implicit biases are unconscious, unintentional forms of prejudice that are grounded in the social practices of dividing people into groups.

Hall and Carlson (2016) contend that health care providers, although well-intentioned, exhibit implicit biases. These biases are internalized behaviors learned through societal norms within a community, media-driven stereotypical exposure, and even the educational process (Hall & Carlson, 2016). Remarkably, in a study conducted by Gonzalez et al. (2014), those health care providers who denied the presence of implicit bias and believed that patients received unbiased equitable care were significantly more likely to discover implicit preferences when completing the Implicit Association Test (Greenwald et al., 1998). Nurses are not immune to the influence of implicit bias in their own practice (Persaud, 2019).

Contrasting explicit bias and implicit bias, Persaud (2019) shares that explicit biases occur "when people are aware of their evaluations of specific groups, believe that they are correct, and act on them in a manner that has a negative impact on others" (p. 130). Persaud (2019) describes unconscious bias as those attitudes that are buried deep within the unconscious - these attitudes are the result of the influence of an individual's culture, personal experiences, and values. These biases develop at an early age and become activated outside the realm of conscious awareness (Persaud, 2019). Universally present in all people, unconscious bias affects nurses as well; unfortunately, nurses bring their bias to their practice (Persaud, 2019).

In a review of nursing literature, Narayan (2019) examines the basis of implicit bias in the realm of heuristics. Heuristics are mental shortcuts; these assist in analyzing the massive amounts of data experienced about people and external phenomena in day-to-day life (Narayan, 2019). In these mental shortcuts, humans separate these experienced data into manageable categories, assigning cognitive judgments to the data. For instance, if a child touches a hot pot on the stove, the child makes a mental judgment of this experience which contributes to safer choices in the future. Taken to a prejudicial extreme, as a result of negative mental images promoted by the media of Black males as criminals, some persons categorize Black males as dangerous. While this stereotype is not valid, the impact of the stereotype may elicit a fear response when a person enters an elevator alone with a Black male. While this is prejudicial thinking, according to heuristics, these unconscious instantaneous thoughts are there to make life safer (Narayan, 2019). Unfortunately, stressful situations create a fight or flight response based on these heuristics (Narayan, 2019). According to Prestia (2019), implicit bias is a matter of human evolution as persons instinctually seek species survival. While these fears are irrational, decisions made in the height of stress do

not depend upon rational thought. These rapid heuristics allow hidden perceptions, attitudes, and bias to present in stressful moments.

The scoping review of Thirsk et al. (2022) highlights the cognitive dissonance that occurs when an otherwise equalitarian individual allows prejudicial behaviors to arise. Focusing on the dual-process theory of cognition (Croskerry, 2009) which is based in cognitive and social psychology, this theory describes the role of heuristics and bias in decision making. Implicit bias is based in what is known as system 1 thinking. System 1 thinking is unconscious, automatic, quick, and involuntary (Thirsk et al., 2022). System 1 thinking occurs when the ability to think analytically is limited, as in situations where time pressure or stress are involved (Thirsk et al., 2022). In contrast, system 2 thinking focuses on analytical, conscious, controlled processes that involve rational thought (Thirsk et al., 2022). With the addition of stressors, implicit bias may lead to discrimination in nursing care and add to potential healthcare disparities.

Defining Attributes
Walker and Avant (2019) suggested that defining attributes demonstrate the cluster of attributes most commonly describing the concept. Defining these attributes allows greater identification of the concept in practice. Examination of the definitions of implicit bias and the literature highlight the emergence of specific themes. A clear understanding of these themes helps to understand the meaning of the concept of implicit bias. The themes are: 1) unconscious preference, 2) stereotypical thoughts, and 3) inequitable treatment.

Unconscious Preference
Implicit bias occurs when a person has an unconscious preference, whether positive or negative, pertaining to a specific social group category – this can be based on race, age, body habitus, gender, religious affiliation, or other differing attributes that distinguish people groups (Thirsk et al., 2022). These preferences lead to prejudicial reactions either benefiting or discriminating against the person of a particular social group.

Stereotypical Thoughts
Implicit bias results when a person has an unconscious expectation of harm or benefit when introduced to a specific social group. These stereotypical thoughts are unconscious and often unexamined (Oxford University Press, 2022a). These stereotypical thoughts are not based on fact, but often on faulty perceptions enhanced by media exposure, education, and social upbringing (Hall & Carlson, 2016).

Inequitable Treatment
In the presence of implicit bias, nurses may treat patients either positively or negatively based on unconscious judgments. This leads to disparities in health care.

Cases
The next step in analyzing a concept per Walker and Avant (2019) is the construction of cases or exemplars of the identified concept. The model case, borderline case, related case, and contrary case illustrate the defining attributes of implicit bias, as well as what behaviors do not constitute implicit bias.

Model Case
Walker and Avant (2019) describe a model case as an example of the concept where all the defining

attributes are present. The following exemplar from Banaji and Greenwald (2013) is a clear example of the concept of implicit bias.

> Carla Kaplan was an assistant professor of American literature at Yale in the late 1980's, a serious young scholar in her late twenties who looked even younger than her actual age. Carla was also a dedicated quilter.
>
> One evening, while she was washing a crystal bowl in her kitchen, it accidentally slipped from her hands. As she tried to catch the bowl, it hit the sink and broke, and the jagged edge slit her hand from mid-palm to wrist. Blood splashed all over the floor, and her boyfriend hastily improvised a bandage before rushing her out the door to drive her to the emergency room of the university affiliated Yale-New Haven Hospital.
>
> At the ER, Carla's boyfriend made it clear to the resident physician on duty that Carla's quilting was very important to her and that he feared the injury might impair the fine motor control she needed for this activity she loved so much. The doctor seemed to understand the concern and expressed confidence that all would be well if they could just "stitch it up quickly."
>
> As the doctor prepared Carla's hand for the stitches, a student volunteer who had been working nearby recognized Carla and exclaimed, "Professor Kaplan! What are you doing here?" and this sentence seemed to stop the doctor in his tracks. "Professor?" he asked. "You're a professor at Yale?" Within seconds Carla found herself on a gurney, being escorted to the hospital's surgery department. The best hand surgeon in Connecticut was called in, and a team worked for hours to restore Carla's hand to perfection (pp. 140–141).

In this case, the doctor exhibited implicit bias. The doctor had an unconscious preference that resulted in poor care for Carla originally – this could be based on her age or gender. The stereotypical thoughts of the physician resulted in inequitable care of Carla until it was determined that she was a professor at Yale. Then, based on a positive implicit bias, Carla received preferential treatment.

Borderline Case

In a borderline case, most, but not all of the defining attributes are illustrated (Walker & Avant, 2019).

> Sally is a nurse at an inner-city urban hospital. One day as she is on the elevator headed to lunch, a large-framed Black man enters the elevator. Sally's pulse quickens and her breathing deepens. She slides to one side of the elevator away from the man. At the next stop, Sally exits the elevator quickly.

In this scenario, Sally has a fear response because of the size of the man and perhaps because of his race. Sally's negative preference causes her to cower in the corner of the elevator; however, no inequitable treatment is rendered. Thus, this attribute of implicit bias is not met.

Related Case

A related case demonstrates how the concept being analyzed is similar to other concepts (Walker & Avant, 2019).

> Jim is a White conservative Christian nurse working in the emergency department. Emergency medical services (EMS) personnel bring a transgender female to Jim's assigned room. While receiving report from the EMS personnel, it is mentioned that the patient is having complications from a gender-affirming surgery. Jim becomes irate and goes to the charge nurse stating, "I will not take care of that man in there. Taking care of his kind goes against my principles."

In this scenario, Jim is exhibiting explicit bias. While there is inequitable treatment, Jim is making a conscious decision to refuse to care for the patient. Explicit bias differs from implicit bias in that it is a conscious choice to treat someone of a differing social group in a prejudicial way.

Contrary Case

A contrary case is an example of what a concept is not, as it does not contain any of the defining attributes of the concept being analyzed (Walker & Avant, 2019).

> Steve is a nurse working in an emergency department triage area. Multiple patients are brought in from a bus accident, many of whom are from varying cultures different than Steve. Steve asks clarifying questions about symptoms of the patients presenting to the department without giving unconscious preference, relying on stereotypical thoughts, or providing inequitable treatment. Steve triages the patients to appropriate locations within the emergency department. There is no inequitable care based on culture differences.

Since implicit bias is universal (Narayan, 2019), it is highly unlikely that Steve or any other nurse could make decisions in the presence of differing cultures or social groups without the presence of bias. Yet, in this scenario, Steve does not have unconscious preferences and there is no inequitable treatment provided. While this is highly improbable, it is hoped that all nurses can overcome implicit biases to address disparities in healthcare.

Antecedents

According to Walker and Avant (2019), antecedents are the events required to occur before a concept occurs. For implicit bias to occur, certain events must occur first. First, social conditioning resulting from education, parental upbringing, media exposure, or anecdotal information occurs in the life of an individual (Narayan, 2019). Secondly, some stressful situation such as time constraints, high acuity levels, or overcrowding of an emergency department precipitates the occurrence of implicit bias (Thirsk et al., 2022). Lastly, a person of a different social category must encounter the individual for implicit bias to occur (Banaji & Greenwald, 2013).

Consequences

Consequences are the events that occur as a result of the occurrence of the concept (Walker & Avant, 2019). The consequences of implicit bias in healthcare include health disparities such as lengthened wait times to see an emergency physician (Allamby et al., 2022, Boley et al. 2022), improper pain management (Tanabe, 2021), or reduced rates of diagnostic radiological imaging (Ross et al., 2020). Discriminatory practices may hamper the nurse-patient trusting relationship (Hyer & Conner, 2020) and be a cause of health illiteracy secondary to loss of trust (Robstad et al., 2019).

Empirical Referents

According to Walker and Avant (2019), empirical referents are categories of the phenomenon being studied that demonstrate "the occurrence of the concept itself" (p. 179). While the defining attributes often become empirical referents themselves, with the abstraction of implicit bias, the defining attributes do not clearly give measurable categories for empirical research except for inequitable treatment. It is feasible to measure inequitable treatment such as door-to-doctor time in the emergency department, delayed admissions, and lack of diagnostic radiological exams in persons of color (Allamby et al, 2022; Boley et al., 2022; Brockett-Walker et al., 2021).

To measure stereotypical thoughts, it is necessary to test the strength of the associations between attitudes and assessments of a social group (Alston, 2021). One of the most famous tests of implicit associations is the IAT, a test founded by Harvard University researchers to evaluate the strength of associations with evaluations (Greenwald et al., 1998). There are currently 14 IAT tests available for research purposes. Using these tests help researchers to identify unconscious preferences and stereotypical thoughts.

Value of the Concept Analysis

The value of a concept analysis is that it not only seeks to gain a depth of understanding about a concept, but that it also assists the person doing the analysis to clearly articulate the true meaning of the concept and its applicability in future research measures (Schiller, 2018). This concept analysis determines defining attributes, antecedents, consequences, and empirical referents to ensure that the concept of implicit bias is thoroughly understood. A comparison between the similar term explicit bias and the defining demarcation between the two is valuable to understand. The cognitive dissonance between equalitarian beliefs and implicit bias is important to understand and identify. Distinguishing the attributes required to define implicit bias aids in both knowledge development and applicability. Comprehending the structure and function of implicit bias will aid future research into the prevalence of implicit bias in triage determination within the emergency department setting.

Limitations

The Walker and Avant (2019) concept analysis method is a valuable tool to conduct analysis of a given concept; yet there are inherent limitations to this method. The first limitation that strongly correlates with this present concept analysis is the challenge in defining concepts of human behavior (Weaver & Mitcham, 2008). As Weaver and Mitcham (2008) share, social interactions, such as those guided by implicit bias, tend to lack objective measurable defining attributes, forcing researchers to rely on subjective behaviors. This concept analysis of implicit bias struggled with this limitation in distinguishing defining attributes and empirical referents. The ability to delineate explicit bias and implicit bias in human behavior is a challenge.

The second limitation of the Walker and Avant (2019) concept analysis method is the use of a positivist-realist paradigm of research (Rodgers et al., 2018). For Walker and Avant (2019), concepts are seen as static and unchanging over time, choosing to define concepts as absolute truth (Weaver & Mitcham, 2008). The concept of implicit bias had evolved over time from the understanding of implicit attitudes (Greenwald & Banaji, 1995) to theoretical understandings of system one heuristics (Croskerry, 2009).

A limitation of this concept analysis is the difficulty in distinguishing implicit bias from explicit bias. While explicit bias is often seen in an empirical action of consciously decided prejudices (Persaud, 2019), implicit bias resides in the subconscious mind (Stamps, 2021) and may not always be acted upon in prejudicial ways or demonstrated by inequitable treatment. A disconnect between the unconscious preferences and stereotypical thoughts in the subconscious mind and prejudicial actions may occur.

Research Implications

Two major lessons have been gleaned from the practice of this concept analysis. These two lessons are the greater understanding of dual process theory for implicit bias and the defining attributes of the concept analysis.

As mentioned above, dual process theory focuses on mental shortcuts called heuristics which guide unconscious thought and corresponding actions (Croskerry, 2009). As implicit bias is based on unconscious thought, these mental shortcuts affect decisions made when experiencing someone of a different race, culture, gender, or religion. This dual process theory helps to establish an undergirding theoretical contribution beneficial to understanding implicit bias and how the human brain unconsciously makes rapid decisions, especially in the antecedent of stress. Understanding those things that come before can help identify the concept and mitigate the consequences.

Defining the attributes of implicit bias, the antecedents, and consequences aid in the identification of the concept and the comprehension of the same. Of note, unconscious preference occurs in an instinctual way of self-preservation; however, mitigation of stereotypical subjugation is a goal in abating the impact of implicit bias. Learning that implicit bias heightens in times of cognitive stress also aid in understanding how the concept of implicit bias impacts nursing as a moral caring profession.

Conclusion

Within this paper, a concept analysis was completed studying implicit bias. The defining attributes were determined from a literature search of nursing and seminal origin papers in social psychology. Defining attributes were identified, as well as antecedents, consequences, and empirical referents. Example cases were given to illustrate the concept in practice.

While much research into the implicit bias of medical providers has been completed, there still exists gaps in research pertaining to implicit bias in nurses. Future research may identify implicit bias in nurses so that methods to mitigate this bias in nursing practice may be found. Becoming aware of personal implicit bias is an important first step.

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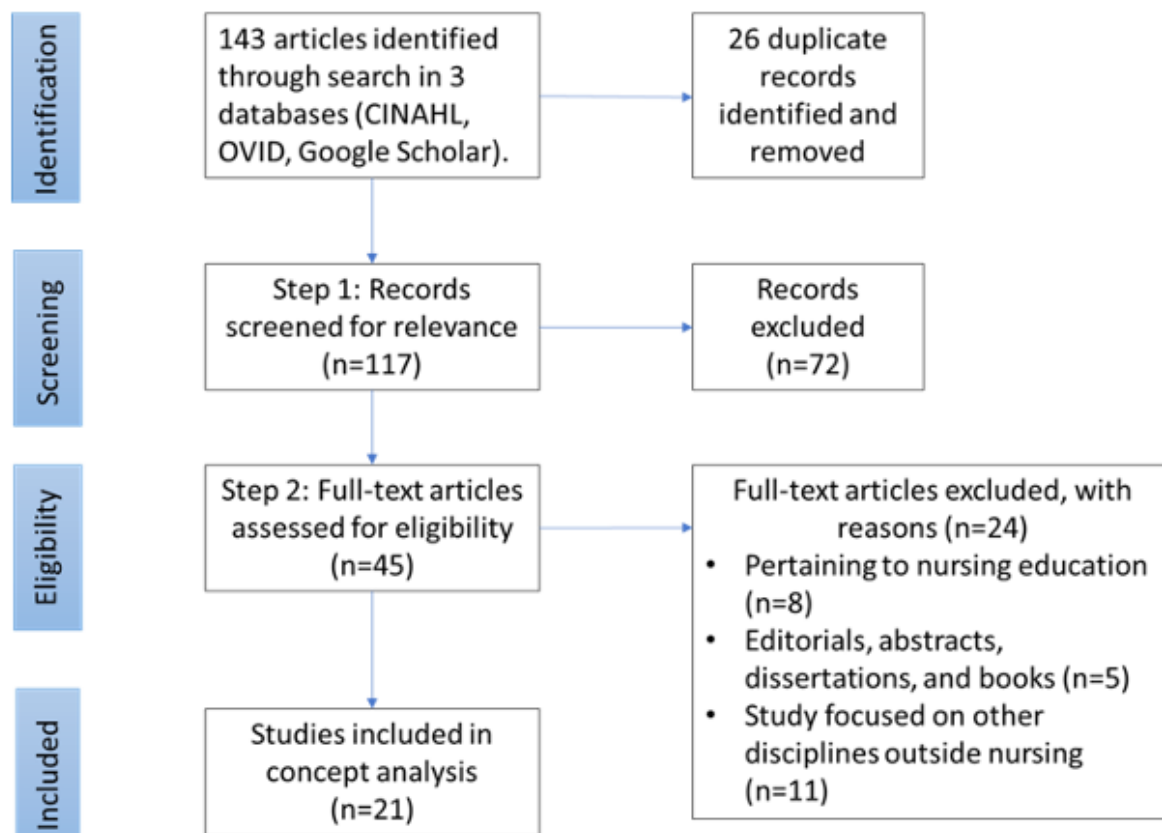
Figure 1. PRISMA flow diagram

An Antibiotic Stewardship Program within Telehealth to Decrease Inappropriate Antibiotic Prescriptions in Acute Uncomplicated Bronchitis

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Abstract

Purpose: Implement and evaluate an antibiotic stewardship program developed by the CDC within the telehealth setting to reduce the rate of antibiotic prescriptions by providers for uncomplicated bronchitis. **Methods:** A quality improvement study was employed within a telehealth practice platform in the Tampa, Florida area. A pre-intervention assessment of the provider's antibiotic prescribing rates for bronchitis was conducted. Implementation included utilization of tools provided by the CDC and a presentation on evidence-based antibiotic prescribing practice guidelines. Post-intervention analysis included an audit with feedback method over a span of three months that assessed provider antibiotic prescribing rates for bronchitis. **Results:** There was a 22.1% decrease from pre-intervention to post-intervention antibiotics prescribed for acute bronchitis. A chi-square test of independence was performed to examine the relationship between antibiotics prescribed for bronchitis and the implementation of an antibiotic stewardship program. The relation between these variables was significant, $X2(1, N = 175) = 13.8829, p = .000195$. Antibiotics were less likely to be prescribed for bronchitis after the implementation of an antibiotic stewardship program in this setting. **Discussion:** Results demonstrated that when antibiotic stewardship programs guided by the CDC are implemented and followed, decreased use of antibiotics can result. This project was limited due to sample size and implementation period. **Conclusions:** Implementing an antibiotic stewardship program framed by the CDC within a clinical site that entails provider education and audit with feedback on providers' prescribing practices was shown to accomplish the goal of decreasing the number of inappropriate antibiotics prescribed for bronchitis.

Key words: Telehealth, antibiotic stewardship program, uncomplicated bronchitis, antibiotic resistance, stewardship

Antibiotic Stewardship Program to Decrease Inappropriate Antibiotic Prescriptions

Antibiotic resistance is an emerging health concern that has the potential to cause devastating effects. The Centers for Disease Control and Prevention (CDC) estimates that as many as 2.8 million individuals are infected with antibiotic-resistant bacteria or fungi in the United States (U.S.). Of those 2.8 million individuals infected, more than 35,000 of them die per year as a result. Antibiotic resistance occurs when bacteria and fungi acquire the ability to combat the drugs that are used to kill them. Infections that are due to antibiotic-resistant organisms are sometimes impossible to treat, leading to extended hospital stays and expensive alternative treatments. Annually, it costs more than $4.6 billion to treat antibiotic-resistant infections. Antibiotic stewardship is an organized program that has been shown to improve the usage of antibiotics, boost patient outcomes, reduce antibiotic resistance, and decrease the spread of infections

caused by multidrug-resistant (MDR) organisms (CDC, 2020). Antibiotic stewardship programs need to be accepted and utilized to decrease the threat of antibiotic-resistant organisms and preserve the effectiveness of our current antibiotics.

Background

Reducing the rates of antibiotic prescribing is a current global health priority. The 2015 United States National Action Plan for Combatting Antibiotic-Resistant Bacteria established a goal to reduce inappropriate antibiotic use by 50% in outpatient care settings, where most antibiotic prescriptions are written by providers. Of the annual 47 million patients inappropriately prescribed antibiotics in the outpatient setting, 34 million prescriptions are written for acute respiratory infections, such as bronchitis. However, adherence to the treatment guidelines set forth by the CDC for uncomplicated bronchitis could eliminate 7.8 million unnecessary prescriptions annually (Grigoryan et al., 2017).

Adding to the clinical dilemma of over-prescribing antibiotics, telehealth visits have increased by more than 12%-25% per year over the last decade (Li et al., 2021). Studies have shown that the increased use of telehealth care is coupled with the increased use of antibiotic prescriptions. Prescription rates for uncomplicated bronchitis within the telehealth setting have shown to be much higher at 66% when compared to traditional face-to-face visits that routinely have roughly a 14.7% of prescription rate. Globally, data from The National Health Service in England found that between April 2020 and August 2020, the was an increase in over 6% of antibiotic prescriptions even though face-to-face visits had decreased by 50%, indicating that the increase in antibiotic prescribing comes from the telehealth setting (Subramanya et al., 2021). Inappropriate antibiotic use is the most significant modifiable aspect in tackling the crisis of antibiotic resistance (File et al., 2020).

Problem Statement

An estimated 154 million yearly outpatient office visits in the U.S. result in a provider writing an antibiotic prescription. Of those, 47 million antibiotics are prescribed unnecessarily and roughly 44% of those individuals were diagnosed with an acute respiratory infection, such as bronchitis. More than half of the unnecessary prescribing occurs in patients between the ages of 20 and 64. As the use of telehealth is surpassing traditional face-to-face visits, it is important to address the telehealth setting to combat inappropriate antibiotic use. Adhering to the prescribing guidelines and antibiotic stewardship programs could eliminate 7.8 million antibiotic prescriptions annually (CDC, 2021).

Purpose of the Project

The main goal of an antibiotic stewardship program is to improve clinical outcomes while decreasing the adverse effects of antibiotic use. Antibiotic stewardship programs are designed to measure and improve how antibiotics are prescribed by providers. Improving how antibiotics are prescribed and used includes implementing effective strategies to change current prescribing practices to align them with current diagnosis and management evidence-based recommendations (CDC, 2020). The purpose of this project is to implement and evaluate a CDC-developed antibiotic stewardship program within the telehealth setting to reduce the rate of antibiotic prescriptions by providers for uncomplicated bronchitis.

Clinical Question and Project Aims

Does implementing an antibiotic stewardship program in the telehealth setting decrease the number of inappropriate antibiotic prescriptions in patients diagnosed with acute uncomplicated bronchitis?

The aims of this project included:
1. Improve antibiotic prescribing by providers to ensure antibiotics are only prescribed when deemed necessary

within the telehealth setting. This aim will be measured by looking at the treatment plan for those with a diagnosis of uncomplicated bronchitis determined by the ICD10 code of J20.9.

2. Evaluate adherence to evidence-based practice guidelines for treating uncomplicated bronchitis within the telehealth setting. This aim will be measured by assessing prescribing rates and treatment plans for those with a diagnosis of uncomplicated bronchitis determined by the ICD10 code of J20.9.

3. Assess antibiotic prescribing rates within the telehealth setting before, during, and after implementation. This aim will be measured by gathering the prescribing rates for those with a diagnosis of uncomplicated bronchitis determined by the ICD10 code of J20.9.

Literature Review

There are many studies and evidenced-based practice guidelines on the development and application of antibiotic stewardship programs in the telehealth setting. Evidence demonstrates the need for implementing an antibiotic stewardship program in the telehealth setting with a focus on those diagnosed with uncomplicated bronchitis. Available literature provides similar results in the prevalence of inappropriate antibiotic prescribing, complications from inappropriate antibiotic prescribing, current practice guidelines for bronchitis, core elements of an antibiotic stewardship program, and potential antibiotic stewardship program initiatives.

Prevalence of Inappropriate Antibiotic Prescription

The use of antibiotics inappropriately is becoming a widespread concern. In the U.S., 23,000 individuals die annually from antibiotic-resistant infections (McDonagh et al., 2018). McDonagh et al. (2018) and White et al. (2019) assessed the extent of inappropriate antibiotic use in outpatient care settings. McDonagh et al. (2018) conducted an integrative review of current evidence-based practice guidelines for acute respiratory tract infections and assessed the prevalence of inappropriate antibiotic use. This review revealed that healthy adults who visited an outpatient care facility for acute bronchitis were given antibiotics 73% of the time, even though data demonstrates that most cases of acute bronchitis are viral in nature, for which antibiotics are not appropriate (McDonagh et al., 2018). White et al. (2019) conducted a quantitative study to distinguish inappropriate antibiotic use between different diagnoses in 1,063 outpatient visits at the Veterans Affairs Western New York Healthcare System. It was demonstrated that 40% of 1,063 patients were prescribed antibiotics inappropriately. Of the 40% who were inappropriately treated with antibiotics, 20% of them were diagnosed with bronchitis (White et al., 2019).

According to Subramanya et al. (2021), Uscher-Pines et al. (2015), and Yao et al. (2021), the inappropriate use of antibiotics is significantly higher in the telehealth setting when compared to the face-to-face setting. Subramanya et al. (2021) gathered data from The National Health Service in England and found that between April 2020 and August 2020, there was a 6% increase in antibiotic prescriptions, although face-to-face visits had decreased by 50%. This study indicates an increase in antibiotic prescribing coming from the telehealth setting.

Uscher-Pines et al. (2015) conducted a quantitative study demonstrating the increased prescribing rates in a telehealth setting at 58% for bronchitis while face-to-face interactions were only at a 55% prescribing rate for bronchitis. While the overall prescribing rates were similar, it was determined that telehealth providers were more likely to inappropriately prescribe antibiotics for conditions such as bronchitis versus providers in the offices (Uscher-Pines et al., 2015). Yao et al. (2021) conducted a quantitative investigation to look at 191 telehealth visits and 277 emergency department visits for bronchitis and compared antibiotic prescribing rates. Overall, antibiotics were prescribed 59% percent of the time in the telehealth setting compared to 39% of the time in the emergency department (Yao et al., 2021).

Complications From Inappropriate Antibiotic Prescription

Antibiotic resistance is becoming one of the most serious threats to mankind's health today (Medina & Pieper, 2016). Harris et al. (2016) conducted a literature review to determine complications from inappropriately treating patients with antibiotics. This review found between 5% and 25% of patients who are treated with an antibiotic developed adverse reactions, such as diarrhea, rash, or anaphylaxis, and about 1 in 1000 developed a serious reaction such as Clostridium difficile, Stevens-Johnson Syndrome, or death.

The inappropriate use of antibiotics is leading to the development of multi-drug resistant (MDR) bacteria. These MDR bacteria include *extended-spectrum beta-lactamase* (ESBL), *carbapenem-resistant Enterobacterales* (CRE), and *multidrug-resistant Acinetobacter baumanni*i (MRAB) (Medina & Pieper, 2016). Superbugs that emerged from these MDR bacteria are considered a global epidemic (CDC, 2020). Some examples of these superbugs include *Methicillin-resistant Staphylococcus aureus, mycobacterium tuberculosis, Klebsiella pneumonia, Streptococcus pneumonia, Clostridium difficile diarrhea, Neisseria gonorrhea, Acinetobacter baumannii, Salmonella, Escherichia coli, Pseudomonas aeruginosa, and vancomycin-resistant Enterococcus species*. Patients presenting with MDR bacteria and superbugs are shown to have higher morbidity and mortality rates (Medina & Pieper, 2016). Highly contagious and life-threatening, *Clostridium difficile diarrhea* usually emerges as the result of antibiotic use and is responsible for 29,300 deaths in the U.S. per year, and is attributable to one billion in medical expenses and extra costs (Harris et al., 2016).

Current Practice Guidelines for Bronchitis

Educating providers on the current practice guidelines for bronchitis is one of the main ways in decreasing inappropriate antibiotic use. Smith et al. (2014) conducted a systematic review that included 15 randomized, controlled trials to assess the impact that antibiotics have on those diagnosed with bronchitis. This review demonstrated that there was little evidence that supported antibiotics use for uncomplicated bronchitis and antibiotic treatment leads to an increase in adverse reactions such as nausea, diarrhea, and anaphylaxis (Smith et al., 2014). National guidelines state that patients with bronchitis should not receive antibiotics unless they also have a diagnosis of chronic bronchitis, emphysema, or COPD (Fleming-Dutra et al., 2016). Guidelines support treatment that is guided toward symptom relief such as cough suppressants, first-generation antihistamines, and decongestants (CDC, 2020).

Antibiotic Stewardship Program Core Elements

Implementing an antibiotic stewardship program should be guided by the core elements that are described by the CDC as an action for policy and practice, tracking and reporting, education, and expertise (CDC, 2020). These core elements were designed to serve as a framework to develop and implement antibiotic stewardship programs in the culture of care delivery within outpatient care settings (Laude et al., 2020). Pedrotti et al (2021) conducted a quantitative study within a telehealth setting to assess antibiotic prescribing rates after a CDC-guided antibiotic stewardship program was implemented. It was found that between January 2019 and February 2020, over 6,050 telehealth visits, antibiotics were only prescribed 2.5% of the time for bronchitis after program implementation. This study demonstrated that adherence to an antibiotic stewardship program can produce positive outcomes (Pedrotti et al., 2021).

Potential Antibiotic Stewardship Program Initiatives

The core elements described by the CDC provide an excellent framework for implementing an antibiotic stewardship program for the telehealth setting. Klein et al. (2017) conducted a mixed methods observational study to determine how provider perception of the risks associated with prescribing antibiotics affected their decision-making regarding the antibiotic prescription. The study demonstrated that when

providers believed there was potential harm, or risk, to the patient related to prescribing antibiotics, the providers were less likely to inappropriately prescribe antibiotics (Klein et al., 2017). These findings support antibiotic stewardship programs by emphasizing the potentially harmful side effects of antibiotics (Marcelin et al., 2020).

Marcelin et al. (2020) conducted a literature review to compile evidence-based recommendations to provide a framework for the development of potential antibiotic stewardship programs. Evidence demonstrated that providers are more likely to stand by their commitment if they make their prescribing intentions public by displaying posters with their signatures pledging responsible antibiotic prescribing. In doing so, there was a 19.7% decrease in prescribing rates within the outpatient care setting (Marcelin et al., 2020).

Du Yan et al. (2021) and Tong et al. (2018) conducted randomized control studies to compare antibiotic prescribing rates based on different implementation styles of antibiotic stewardship programs. Tang et al. (2018) split 62 physicians into two randomized antibiotic stewardship intervention groups. 'Group A' received best practice guidelines education for bronchitis and 'Group B' received the same education plus an individualized audit with feedback on antibiotic prescribing rates over two months. Results demonstrated that 'Group A' went from 71% prescribing rates for bronchitis to 63%, while 'Group B' went from 69% to 46%. These results demonstrate that an individualized audit with feedback on providers' prescribing practices, coupled with best practice guidelines education, is more effective than education alone in reducing unnecessary antibiotic prescriptions (Tong et al., 2018).

Summary of Available Literature
In conclusion, evidence demonstrates the harmful side effects of inappropriately prescribing antibiotics. The increased rates of inappropriately prescribing antibiotics are leading to harmful multi-drug resistant organisms (MDROs) and superbugs that we aren't able to treat with our standard treatments. The CDC provides a framework for implementing an antibiotic stewardship program in telehealth settings. The CDC also provides many tools, such as posters, to hang in the patient care areas, patient education regarding safe prescribing, and provider education on the most up-to-date treatment guidelines for bronchitis. Implementing an antibiotic stewardship program framed by the CDC that entails provider education and audits with feedback on providers' prescribing practices is proven to accomplish the goal of decreasing the number of inappropriate antibiotics prescribed for bronchitis in the telehealth settings.

Conceptual and Theoretical Framework
Kurt Lewin's Change Theory provides a foundation for considering the process of planned change (McEwen & Wills, 2011). The foundation of Lewin's Change Theory is based on three concepts: driving forces, restraining forces, and equilibrium (McEwen & Wills, 2011) and includes three phases: unfreeze, change, and refreeze (Cummings et al., 2016). This theory will be used to support the implementation of an antibiotic stewardship program.

Concepts of Lewin's Change Theory
According to McEwen and Wills (2011), the driving forces are the facilitators and encouragers for change to occur. The driving forces are responsible for the shift in equilibrium that occurs due to change, and they should be accentuated. Restraining forces are the opposite in that they inhibit or impede any progress made toward a change. Restraining forces need to be identified and minimalized to achieve the process of change. Equilibrium is the result of effective change when opposing forces, that are driving and restraining forces, are balanced (McEwen & Wills, 2011).

Unfreeze, Change, and Refreeze

The three stages that must occur for planned change to be successful are unfreeze, change, and refreeze. In the unfreeze stage, individuals are made aware of the need for change and group conformity should occur (McEwen & Wills, 2011). Establishing a change agent and creating a sense of necessity is also part of this stage (Shirey, 2013). This is accomplished by increasing the driving forces and decreasing the restraining forces. The second stage is change. This occurs when the driving forces surpass the restraining forces, allowing change to occur. The third stage is refreezing. During this stage, stabilization occurs, and the change becomes a habit (McEwen & Wills, 2011). In this stage, if stabilization is successful, then the change is integrated into the system as a whole. In turn, this will produce a new equilibrium within the organization (Shirey, 2013; McEwen & Wills, 2011).

Application of the Change Theory

Current literature reveals that Lewin's Change Theory is used considerably in nursing practice, education, administration, and healthcare operations (Shirey, 2013). This Change Theory provides a framework for the evidence-based project entitled "An Antibiotic Stewardship Program within Telehealth to Decrease Inappropriate Antibiotic Prescriptions in Acute Uncomplicated Bronchitis".

Resistance to Change

Change can be viewed by most as stressful and unnecessary. This often leads to feelings of uncertainty, loss of control, and apprehension (McEwen & Wills, 2011). The first step in Lewin's Change Theory, unfreezing, allows for the providers to be the change agents, and determine what the driving and restraining forces are. A necessity for change is established with provider education, which will be accomplished by offering the providers with current practice guidelines for those diagnosed with uncomplicated bronchitis. This will also involve educating the providers on the importance of an antibiotic stewardship program and what encompasses the intervention, which will lead to providers being less resistant to the change that needs to occur and in turn, becoming the driving forces needed for change to occur.

Implementing an Antibiotics Stewardship Program

The second stage, change, will occur with the implementation of the antibiotic stewardship program. This involves having the providers sign contracts stating that they will prescribe antibiotics according to current practice guidelines. Evidence shows that providers are more likely to stand by their commitment if they make their intentions public (Marcelin et al., 2020).

The Decrease in Inappropriate Antibiotic Use

This last stage, refreezing, will occur with a new equilibrium within the telehealth care setting that will result in stabilization and change throughout the organization in which there will be a decrease in antibiotic prescriptions for uncomplicated bronchitis. This will be accomplished by defining the set expectations that the practice has on antibiotic prescribing by utilizing educational tools from the CDC to educate providers and patients on safe prescribing. Support from all stakeholders should continue for the desired outcome.

Methodology and Implementation

This quality improvement project focused on implementing an antibiotic stewardship program within a telehealth setting to decrease the number of inappropriate antibiotics prescribed for uncomplicated bronchitis. This project took place within a telehealth practice based in Tampa, Florida. The practice in-

cluded Medical Doctors (MDs), Physician Assistants (PAs), and Nurse Practitioners (NPs) who provide care using a telehealth platform to see patients within Tampa and surrounding areas. Key stakeholders that supported the implementation of this project included the Chief Medical Officer (CMO) and a Doctor of Nursing Practice (DNP)-prepared leadership team member within the organization. Participation in the quality improvement project was voluntary. The timeline for this project can be found in Appendix A.

Pre-intervention began with provider education on current practice guidelines for bronchitis, as well as an overview of the purpose of an Antibiotic Stewardship Program. The education provided included an evidence-based presentation from the Wake Forest University School of Medicine. Permission was obtained by the author to use the material for educational purposes (Appendix B). Then, providers were given their prescribing rates for bronchitis from November 2021 to January 2022. Information on individual provider prescribing rates were obtained from an honest broker that imported the information into the data collection worksheet. All data were de-identified to keep providers' and patient information confidential (Appendix C).

Implementation included utilizing CDC-provided tools to support site adoption of this antibiotic stewardship program. *A Virus or Bacteria poster* (Appendix D) was displayed electronically for patients to see while they waited for their telehealth provider to appear on the screen. Then, a provider *Commitment to Improving Antibiotic Use* (Appendix E) was utilized in the education provided to the patient after their visit to allow providers to demonstrate their commitment to improving the use of antibiotics.

Post-intervention began with utilizing an audit with feedback method over a span of three months (November 2022, December 2022, January 2023). Each month, providers were provided with their prescribing rates for those diagnosed with bronchitis. At the end of the three months, data were summarized to assess the successfulness of the antibiotic stewardship program, demonstrated by a decrease in antibiotics prescribed for bronchitis, within the telehealth setting.

Human Subject and Informed Consent
This quality improvement project was submitted to the Florida State University Institutional Review Board (IRB) for exemption status approval before initiating. All information, including provider and patient identifiers, was secured and the confidentially of both the provider and patients was maintained. All information given to the student was collected by an honest broker and de-identified. Collected data was stored on a password-protected device. There was no identified increased risk to patients during this project implementation.

Data Analysis
This quality improvement project assessed prescribing rates from the months of November 2021, December 2021, and January 2022 and was compared with the months of November 2022, December 2022, and January 2023 to determine if there was an improvement in providers' prescribing rates for bronchitis after implementation of the antibiotic stewardship program. The data was collected by an honest broker and imported to an excel spreadsheet in a de-identified manner. The data was then analyzed using a Chi-Square test. Individual provider antibiotic prescribing rates were analyzed using either a Chi-Square test or a Fisher Exact test if the sample size (total number of acute bronchitis diagnoses seen) was less than five.

Results

Demographics

A total of 16 providers participated in the implementation of the antibiotic stewardship program. The providers included MDs, PAs, and NPs who practiced on the telehealth platform. Of the 16 providers that participated, 56% of them were NPs, 38% of them were PAs, and 6% were MDs. Antibiotic prescribing rates were assessed on charts using only the ICD 10 code of J20.9, indicating a diagnosis of acute bronchitis.

Clinical Aim #1.

The first aim of this project was to improve antibiotic prescribing rates by providers to ensure antibiotics were only prescribed when deemed necessary within the telehealth setting. This was measured by looking at the prescribing rates of each provider for those with a diagnosis of uncomplicated bronchitis determined by the ICD10 code of J20.9. The initial months of November 2021, December 2021, and January 2022, which demonstrated pre-intervention data, had an antibiotic prescribing rate of 82.1%. The months of November 2022, December 2022, and January 2023, which demonstrated post-intervention data, had an antibiotic prescribing rate of 60%. There was a 22.1% decrease from pre-intervention to post-intervention in antibiotics prescribed for acute bronchitis, which is depicted in Table 1. A chi-square test of independence was performed to examine the relationship between antibiotics prescribed for bronchitis and the implementation of an antibiotic stewardship program. The relation between these variables was significant, $X^2(1, N = 175) = 13.8829, p = .000195$. At this clinical site, antibiotics were less likely to be prescribed for bronchitis after the implementation of an antibiotic stewardship program.

Clinical Aim #2.

The second aim of this project evaluated providers' adherence to evidence-based practice guidelines for treating uncomplicated bronchitis within the telehealth setting. This was measured by assessing each

Table 1
Antibiotics Prescribed Pre- and Post-intervention
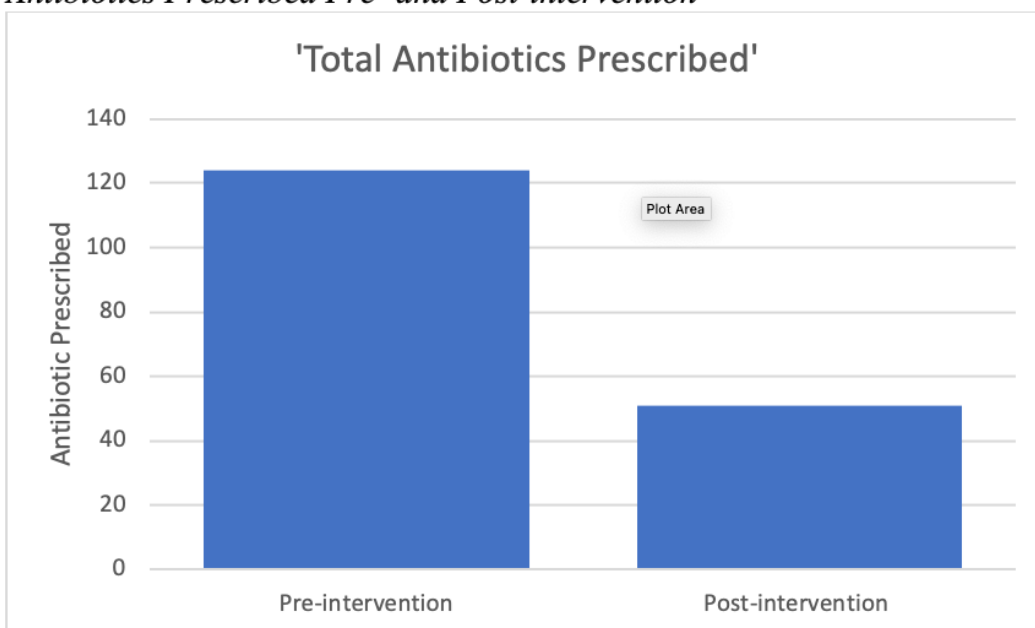
Figure 1
Cross-tabulation for Antibiotics Prescribed Pre- and Post-intervention

Antibiotics Prescribed	Pre-intervention	Post-intervention
Yes	124	51
No	27	34
Total	151	85

provider's prescribing rates and treatment plan for those with a diagnosis of uncomplicated bronchitis determined by the ICD10 code of J20.9. Individual provider antibiotic prescribing rates were analyzed using either a Chi-Square test or a Fisher Exact test if the sample size (total number of acute bronchitis diagnoses seen) was less than 5. East test performed used a significance level of 0.05 to determine if there was a significant change to the rates of antibiotics prescribed pre- and post-intervention.

Pre-intervention, provider 'A' had an antibiotic prescribing rate of 92.2% which decreased to a rate of 56.3% post-intervention (p=.0001112). Pre-intervention, provider 'B' had an antibiotic prescribing rate of 93.3% and decrease to a rate of 68% post-intervention (p=.005261). Pre-intervention, provider 'E' had an

Figure 2:
Provider Prescribing Rates Pre- and Post-Intervention
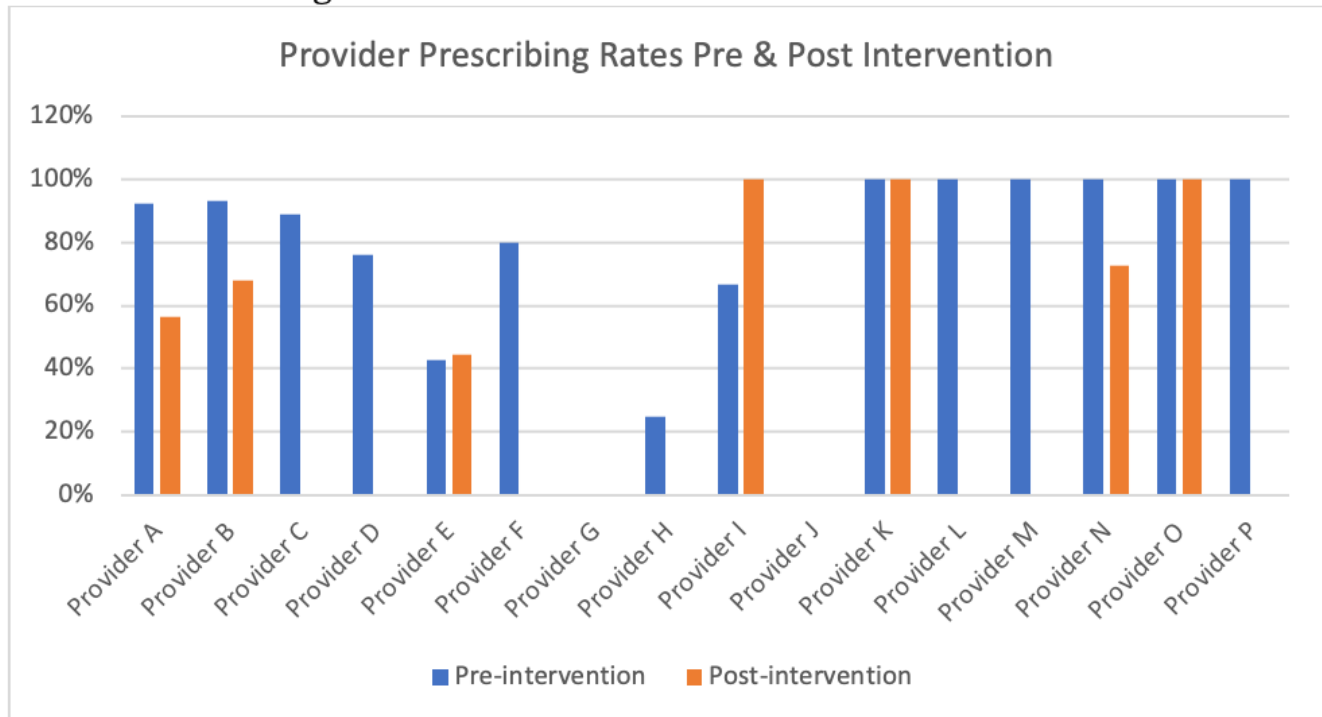
antibiotic prescribing rate of 42.9% which increased to 44.4% post-intervention (p=.949375). Pre-intervention, provider 'F' had an antibiotic prescribing rate of 80% which decreased to 0% post-intervention (p=.3333). Provider 'G' had an antibiotic prescribing rate of 0% both pre- and post-intervention. Provider 'H' had an antibiotic prescribing rate of 25% pre-intervention and decreased to 0% post-intervention (p=1). Provider 'I' had an antibiotic prescribing rate of 66.7% pre-intervention and increased to 100% post-intervention (p=1). Provider 'N' had a pre-intervention antibiotic prescribing rate of 100% which decreased to 72.7% post-intervention (p=1). Providers 'K' and 'O' both had an antibiotic prescribing rate of 100% pre- and post-intervention. Providers 'C, D, J, L, M', and 'P' only had patients with the diagnosis code of J20.9 in the pre-intervention assessment and not the post-intervention assessment.

Clinical Aim #3.
The third aim of this quality improvement project was to evaluate the provider's antibiotic prescribing rates within the telehealth setting before, during, and after implementation. This was measured by looking at the antibiotic prescribing rates for those with a diagnosis of acute bronchitis determined by the ICD 10 code of J20.9. This was completed by utilizing an audit with feedback method over the span of three months (November 2022, December 2022, and January 2023). Each month, providers were provided with their prescribing rates for those patients diagnosed with bronchitis. From November 2022 to December 2022 the antibiotic prescribing rates decreased from 69% to 26.9%. For the month of January 2023, the antibiotic prescribing rates increased from 26.9% to 80%.

Discussion
An estimated 154 million outpatient office visits in the U.S. result in an antibiotic prescription annually. Of those 154 million outpatient visits, 47 million are prescribed antibiotics unnecessarily. Adhering to the prescribing guidelines and antibiotic stewardship programs could eliminate 7.8 million antibiotic prescriptions annually (CDC, 2020). This quality improvement project was conducted to assess the effectiveness of an antibiotic stewardship program within the telehealth setting in decreasing the number of antibiotics prescribed for bronchitis. This study focused on providers who participated within a telehealth practice platform in the Tampa, Florida area. At the end of a three-month period, where an audit with feedback method was utilized, the providers that were observed decreased their antibiotic prescribing rates from 82.1% pre-intervention to 60% post-intervention. These findings are similar to those in previous studies that found a reduction in antibiotics prescribed for bronchitis in groups receiving education plus individualized feedback compared with the groups that only received education (Du Yan et al., 2021).

The data that was collected for this quality improvement project supports that the educational intervention, which included a PowerPoint presentation and utilization of tools provided by the CDC, using an audit with feedback method, decreased the number of antibiotics prescribed for bronchitis in the telehealth setting. Pedrotti et al. (2021) demonstrated that when antibiotic stewardship programs guided by the CDC are implemented and followed, positive outcomes can result. It was found that between January 2019 and February 2020, over 6,050 telehealth visits were held and antibiotics were only prescribed 2.5% of the time for bronchitis after the implementation of the antibiotic stewardship program (Pedrotti et al., 2021). Further research should be conducted to assess the effectiveness of an antibiotic stewardship program within the Telehealth setting.

Limitations
There were multiple limitations to this quality improvement project. This project was conducted on a telehealth basis, which may not be representative of other healthcare settings. The sample size of 16 provid-

ers was small due to the number of participants within the clinical site. The implementation period was also short in assessing three months pre-intervention and three months post-intervention. Not all providers were able to see patients with a diagnosis of bronchitis during the three months post-intervention, so data were not analyzed on them. An extended timeframe would allow for all providers to have a chance to utilize the tools that were provided to aid in the antibiotic stewardship program. Specific factors that were not assessed that could have influenced this study include patient demographics and provider experience.

Implications

Antimicrobial resistance is a growing public health issue that could have disastrous consequences. Currently, one of the top global health priorities is lowering antibiotic prescription rates (Grigoryan et al., 2017). As much as 7.8 million antibiotic prescriptions could be avoided each year by following the prescribing guidelines and participating in antibiotic stewardship initiatives (CDC, 2021). Laude et al. (2020) supported the utilization of an antibiotic stewardship program that involved provider education, chart audits, provider feedback, and patient education when their study revealed that antibiotic stewardship interventions that were guided by the core elements defined by the CDC over 2.5 years, provided a 36% reduction in the overall antibiotic prescribing rates. This quality improvement project has demonstrated the effectiveness of an antibiotic stewardship program within the telehealth setting in decreasing the number of antibiotics prescribed for bronchitis. Healthcare organizations should begin implementing evidence-based antibiotic stewardship programs to aid in the combat against antibiotic resistance, and DNP-prepared practitioners are well-positioned to lead this work as experts in implementation science.

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Appendix A
Project Timeline
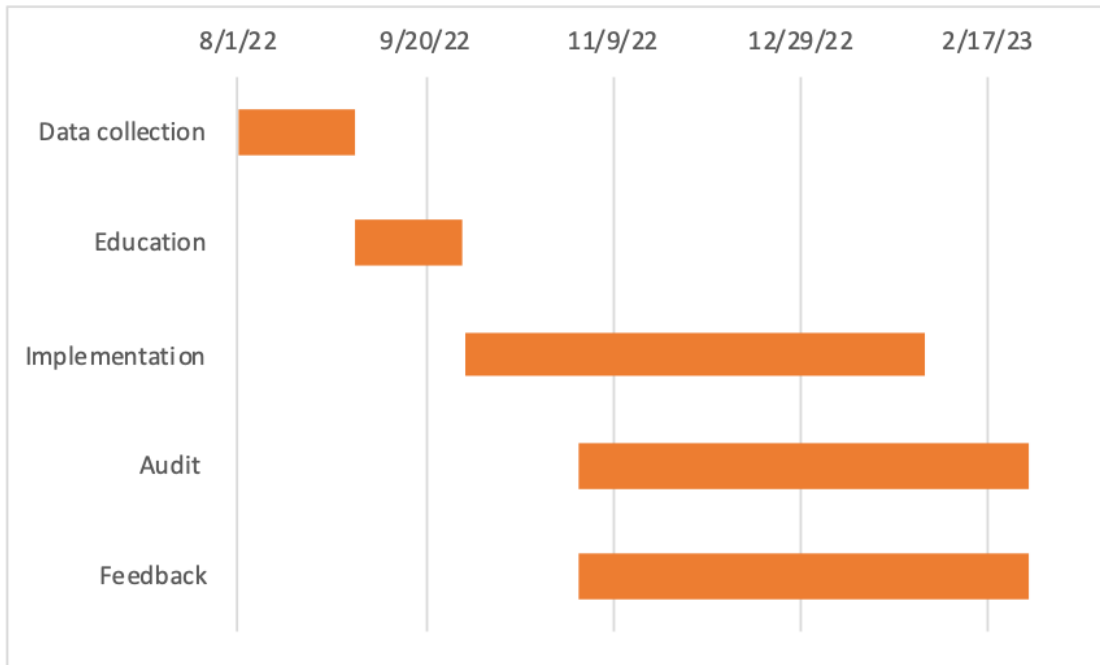
Appendix B
Permission for education use

Jordan Burnam
Sat 2/26/2022 9:36 AM
To:
- ████████████

My name is Jordan Burnam and I am currently in a graduate program with Florida State University completing my Doctor of Nursing Practice degree. I am currently working on my DNP project, which focuses on Implementing an Antibiotic Stewardship Program within the outpatient care setting.

I have read your curriculum and would like to ask your permission to use part of your lectures for the education that will be provided to the providers participating in my project.

I will absolutely give credit to you and the Wake Forest School of Medicine for the information within the PowerPoint.

Please contact me should you have any questions.

Thank you for your time,
Jordan Burnam, DNP Student
816-804-6075

CO
████████████████████
Mon 2/28/2022 11:55 AM
To:
- Jordan Burnam
Cc:
- ████████████████████
No problem. Good luck!

████████████
Professor of Medicine
Section on Infectious Diseases
Wake Forest University School of Medicine
100 Medical Center Blvd
Winston-Salem, NC 27157
336-716-4070, Fax 336-716-3825

Appendix C
Data Collection Worksheet

Column1	Column2	Novermber 2021, December 2021, January 2022	Nov-22	Dec-22	Jan-23	Total 3 months
Provider A	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider B	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider C	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider D	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider E	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider F	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider G	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider H	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider I	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider J	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider K	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					
Provider L	Number of Brochitis diagnosis					
	Number of antibitics written					
	Antibiotic prescribing Rate(%)					

Appendix D
Virus or Bacteria Poster

Viruses or Bacteria
What's got you sick?

Antibiotics are often prescribed when they are not needed for respiratory infections. Antibiotics are only needed for treating certain respiratory infections caused by bacteria. Viral illnesses cannot be treated with antibiotics. When an antibiotic is not prescribed, ask your healthcare professional for tips on how to relieve symptoms and feel better.

Common Respiratory Infections	Common Cause			Are Antibiotics Needed?
	Virus	Virus or Bacteria	Bacteria	
Common cold/runny nose	✔			No
Sore throat (except strep)	✔			No
COVID-19	✔			No
Flu	✔			No
Bronchitis/chest cold (in otherwise healthy children and adults)*		✔		No*
Middle ear infection		✔		Maybe
Sinus infection		✔		Maybe
Strep throat			✔	Yes
Whooping cough			✔	Yes

* Studies show that in otherwise healthy children and adults, antibiotics for bronchitis won't help you feel better.

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

To learn more about antibiotic prescribing and use, visit www.cdc.gov/antibiotic-use.

CDC

CS327027-A

Appendix E
A Commitment to Improving Antibiotic Use

A Commitment to Improving Antibiotic Use

Antibiotics are powerful, lifesaving medications. We are **dedicated** to prescribing antibiotics when they are needed, and we will avoid prescribing antibiotics when they are not needed as they may do harm. When your healthcare professional prescribes antibiotics, take them as directed.

Antibiotics fight infections caused by **bacteria**. Antibiotics don't work against **viruses** that cause the common cold, most coughs, and sore throats.

You can experience side effects while taking antibiotics. Common side effects could include a skin rash, diarrhea, or a yeast infection. More serious side effects could include a *C. diff* infection, which causes severe diarrhea that can lead to severe colon damage and death.

Using antibiotics also gives bacteria a chance to become more resistant to them. This can make future infections harder to treat, which means that antibiotics might not work when you really do need them.

Taking antibiotics only when needed helps keep you healthy, helps fight antibiotic resistance, and ensures that these life-saving drugs will be available for future generations.

We will answer any questions about the role of antibiotics in your treatment.

Sincerely,

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

To learn more about antibiotic prescribing and use, visit **www.cdc.gov/antibiotic-use** or call 1-800-CDC-INFO.

CDC

CS324363K

Art Submission: *Blooming Tulip: A Sign of Hope*
David (Hyunmin) Yu, MSN, RN, AGACNP-BC, CCRN, TCRN

During the long and arduous PhD journey, there are days when we, as students, feel anxious or restless about the lack of immediate results. To convey the idea that we will eventually reach our goals as long as we persist at our own pace, I submitted a photo of a tulip that blooms brightly in spring after enduring the harsh winter. It symbolizes the moment when we will also welcome the arrival of our own "spring" (or time to shine).

The Health Stigma and Discrimination Theoretical Framework: Analysis and Evaluation

Jeanne Bernier, MSN, RN, CNL-BC

Jeanne Bernier is a 3rd year student in the PhD in Nursing program at the University of Tennessee in Knoxville, TN. She is a Registered Nurse and a certified Clinical Nurse Leader.

Abstract

The Health Stigma and Discrimination Framework (HSDF) was developed to recognize and stop health-related stigma, or to minimize the negative health outcomes associated with health-related stigma and discrimination by creating an organized theoretical framework to guide research, intervention development and measurement, and social and healthcare policy. The purpose of this article is to deliver an analysis and evaluation of the HSDF as a middle range nursing theory. Theory analysis follows Walker and Avant's (2018) six steps in theory analysis, and theory evaluation applies Peterson and Bredow's (2019) middle range theory evaluation process. Empirical research provides evidentiary support of the usefulness and significance of the HSDF. Benefits of the framework are discussed including conceptual clarity, robust relational consistency between concepts, and overall usefulness. Implications for future research are suggested, including applying the HSDF to a wider range of health conditions and attaining a stronger presence in health-related databases to promote utilization.

Keywords: Health Stigma and Discrimination Framework, stigma, discrimination, health-related stigma, stereotype, drivers, facilitators, analysis, evaluation, middle range theory, middle range nursing theory, theoretical framework

The Health Stigma and Discrimination Theoretical Framework: Analysis and Evaluation

A fundamental tenet of healthcare is that all patients deserve equal treatment regardless of individual characteristics or health conditions. Health-related stigma and discrimination negate this central principle because people who are stigmatized or discriminated against may feel as though they do not receive equal and unbiased care. In his groundbreaking book, Erving Goffman identified stigma as a personal or group attribute labeled as less worthy, less valuable, or different (Goffman, 1963). The worth of the attribute is questioned or lessened when it is stigmatized, and the effects of stigma can be broad and long-lasting. Discrimination is derived from stigma and essentially is treating someone or a group of people differently from others (Merriam-Webster, 2021). It is a social construct of unfair treatment that can result in negative health outcomes (Office of Disease Prevention and Health Promotion, n.d.). Health-related stigma is the product of labeling human differences, and the level of stigmatization towards a health condition is based on the social significance of that health condition. Stereotyping occurs when a person or group of people are marked with one or more unfavorable characteristic connected to a health condition, and stereotyping is a key element of health-related stigma (Link & Phelan, 2006). The terms stigma and stereotype tend to be used interchangeably, but health-related stigma includes

the concurrent incidences of stereotyping, labeling, and discrimination (Link & Phelan, 2001). Stangl and colleagues (2019) developed the Health Stigma and Discrimination Framework (HSDF) with the overarching goal to recognize and stop health-related stigma, or to minimize the negative health outcomes associated with health-related stigma and discrimination by creating an organized theoretical framework to guide research, intervention development and measurement, and social and healthcare policy.

The purpose of this article is to deliver an analysis and evaluation of the HSDF when used as a middle range nursing theory. Middle range theories are derived from overarching abstract grand theories and are operationalized to influence nursing practice in academic and clinical settings, yet they are not limited to a specific clinical situation. Therefore, middle range theories are practical for both nursing research and practice (Peterson & Bredow, 2019). Theory analysis will follow Walker and Avant's (2018) six steps in theory analysis, and theory evaluation will apply Peterson and Bredow's (2019) middle range theory evaluation process. These processes for analysis and evaluation were selected because of their relevance in and applicability to current nursing science.

Background

The HSDF is deduced from previous theoretical and conceptual frameworks related to stigma associated with one health condition. Historically, health-related stigma has related to a certain stereotyped health condition like HIV/AIDS, obesity/overweight, and mental health issues, and the available frameworks were linked to a specific health condition (i.e., the Mental Illness Stigma Framework and the Cyclic Obesity/Weight-Based Stigma model) (Stangl et al., 2019). Desiring a broader and more encompassing framework to apply across all health conditions, Stangl et al. (2019) began developing the HSDF after a 2017 stigma research and global health workshop organized by the Fogarty International Center and through analysis of over twenty previous research studies and empirical articles. As a newer theoretical framework, the HSDF has yet to be analyzed and evaluated from a nursing perspective based on its core concepts, organization, and empirical support. Examining the HSDF from a nursing perspective is important because nurses generally spend the most time with patients during hospitalization (Shreffler et al., 2021) and evidence shows that patients have experienced disparate treatment because of a health condition (Jaiteh et al., 2019). Nursing researchers currently assess for illness-related stigma through the use of specific measurement tools (i.e., the Perception of Opioid Use Survey and the Alcohol and Alcohol Problems Perception Questionnaire) but a knowledge gap remains related to general health-related stigma, how to stop it, and ways to prevent it in the future.

The authors of the HSDF hail from North America, Europe, and South Africa and have accomplished backgrounds in public health, psychology, social work, medicine, epidemiology, and social policy. Their work spans the globe and their contributions to combating health-related stigma is useful and applicable to people across all cultures. While none of the authors have a nursing background, the work they created is applicable to a range of health conditions; therefore, it is applicable to nursing practice, intervention, and research.

Theory Analysis

Nursing theory analysis involves a methodical investigation of the theory to reach understanding (Walker & Avant, 2018). Utilizing Walker and Avant's (2018) six steps in theory analysis, this paper will explore the following areas of the HSDF: the origins of the theory, the meaning of the theory, the logical adequacy of the theory, the usefulness of the theory, the generalizability and parsimony of the theory, and finally, the testability of the theory.

Origins

The genesis of the HSDF is deduced from past stigma-related theoretical and conceptual frameworks focusing on one health condition at a time. The narrower focus of these past frameworks limits their generalizability, and thus, their potential influence. Stangl et al. (2019) developed the HSDF to guide intervention and research of a variety of health conditions like epilepsy, leprosy, and cancer to compare findings, analyze results, and implement evidence-based change across health conditions and patient populations. Furthermore, while past theoretical frameworks explored health conditions at the individual level, the HSDF explores the psychological components of health-related stigma on the individual level as well as the social and structural levels which include cultural influences, gender norms, the legal environment, and associated health policy practices (Stangl et al., 2019).

Meaning

The meaning of a theory is derived from its concepts and their definitions, relational statements made about the concepts, and the boundaries of the theory (Walker & Avant, 2018). After careful analysis of these three components, empirical support for the meaning of the theory will be assessed using current and relevant research incorporating and utilizing the HSDF.

Concepts. Concepts are considered primitive, concrete, or abstract, and definitions are classified as either theoretical, operational, descriptive, or non-existent (Walker & Avant, 2018). The HSDF includes the following primary concepts (see Table 1) and secondary concepts (see Table 2) organized in three domains: drivers, facilitators, stigma marking, stigma manifestations (primary concepts); intersecting stigma, stigma experiences, experienced discrimination, experienced stigma, internalized stigma ('self-stigma'), perceived stigma, anticipated stigma, secondary (associative) stigma, and stigma practices (secondary concepts). The first domain includes the drivers and facilitators of stigma (Stangl et al., 2019). Drivers cause or enable health-related stigma and are fundamentally negative. Facilitators influence stigma and can be positive or negative. Drivers and facilitators have the potential to result in the second domain of the HSDF, stigma marking, in which stigma is linked to individuals or groups because of a health condition or a perceived difference (Stangl et al., 2019). Through a single or intersecting stigma (marking with more than one stigma including stigmas unrelated to health, such as gender, occupation, and sexual orientation), stigma manifestations occur in the form of stigma practices or experiences. This delineates the third domain of the HSDF. Stigma manifestations have the potential to impact health and social outcomes for individuals and groups (Stangl et al., 2019).

The concepts included in the HSDF are clearly and thoroughly defined. More importantly, the use of the concepts and their meanings are consistent throughout the framework (Walker & Avant, 2018). The HSDF is used in research to predict and understand potential outcomes to people and populations experiencing stigma, to organizations and institutions related to health, and more generally to the health and social impacts that stigma can have on overall quality of life, morbidity, and mortality (Stangl et al., 2019).

Table 1

Health Stigma and Discrimination Framework Primary Concepts and Definitions

Concept	Type of Concept	Definition	Classification
Drivers	Abstract	Fundamentally negative factors that drive or enable health-related stigma.	Theoretical
Facilitators	Concrete	Positive or negative influences on health-related stigmas.	Operational
Stigma marking	Concrete	Resulting from drivers and facilitators, stigma is linked to individuals or groups because of a health condition or other perceived differences.	Operational
Stigma manifestations	Concrete and abstract	Stigma experiences and practices (see table 2).	Theoretical, operational, and descriptive

Table 2

Health Stigma and Discrimination Framework Secondary Concepts and Definitions

Concept	Type of Concept	Definition	Classification
Intersecting stigma	Concrete and abstract	Stigma marking with multiple stigmas including stigmas unrelated to health.	Theoretical, operational, and descriptive
Stigma experiences	Concrete and abstract	Includes experienced discrimination, experienced stigma, internalized (self-) stigma, perceived stigma, anticipated stigma, secondary (associative) stigma.	Operational and descriptive
Experienced discrimination	Concrete	Stigmatizing behaviors that carry legal repercussions for the responsible individual(s).	Operational
Experienced stigma	Concrete and abstract	Stigmatizing behaviors that do not carry legal repercussions for the responsible individual(s).	Descriptive
Internalized stigma or 'self-stigma'	Abstract	The acceptance of stigmatizing traits.	Theoretical
Perceived stigma	Abstract	Assumptions of how a stigmatized individual(s) will be treated in a certain situation.	Theoretical
Anticipated stigma	Abstract	Expectation of stigmatization based on a certain health condition(s).	Theoretical
Secondary stigma or associative stigma	Concrete and abstract	Family or friends of stigmatized individuals(s) experiencing stigma themselves.	Theoretical and operational

Concept	Type of Concept	Definition	Classification
Stigma practices	Concrete and abstract	Stereotyping (also a Driver), prejudicial behavior (also a Driver), stigmatizing behavior, and discriminatory attitudes.	Theoretical and operational

Relational Statements. Relationships between concepts should be present and consistent throughout a theoretical framework, and relational statements will elucidate these correlations. Causal relationships exist when one concept causes another. Associational relationships exist when two or more concepts are related in either a positive, negative, or unknown way (Walker & Avant, 2018). A positive associational relationship is one where concepts change together, and a negative associational relationship occurs when concepts change inversely or opposite of each other (Walker & Avant, 2018). With the HSDF, drivers and facilitators have causal relationships with stigma marking and manifestations; drivers and facilitators cause stigma marking and stigma manifestations. Stigma experiences result from drivers, facilitators, and stigma marking, and each stigma experience can have a positive or negative association with each other based on the situation (Stangl et al., 2019). Stigma practices can have a positive or negative association with divers and facilitators again, based on the situation. Stangl et al. (2019) consistently apply conceptual terms throughout the HSDF; therefore, concept and relational clarity is ever-present.

Boundaries. The HSDF serves as a middle range theory because it contains practice-level implications without being limited to one diagnosis, population, or discipline. The authors of the theoretical framework intend it for use across disciplines and cultures to standardize measures and procedures, compare results and outcomes across illnesses and fields, and plan interventions that are more effective for the general population rather than for those suffering a certain health condition (Stangl et al., 2019).

Empirical Support. Six articles were identified when determining empirical support for the HSDF (see Table 3). One article was co-written by an author of the seminal HSDF report (Carmen H. Logie), and five articles were written by other authors. Three articles employed qualitative designs to explore the relationships between stigma and HIV/AIDS or people living with HIV/AIDS (PLWHA) (Fauk et al., 2021; Ferraz et al., 2019; and Logie et al., 2021). One report explored COVID-19 related stigma and discrimination (Ransing et al., 2021). Finally, two articles aimed to systematically review literature concerned with health-related stigmas. One was a scoping review meant to reveal what is known about human papilloma virus (HPV) infection and vaccination stigmas as well as cervical cancer and screening related stigmas (Peterson et al., 2021). The last and most recent article proposed a protocol to guide systematic review of current literature related to stigmatized conditions in migrant and minority groups based on the HSDF (Douglass et al., 2022).

Fauk et al. (2021) aimed to describe the viewpoints and personal experiences of health care providers caring for people living with HIV/AIDS (PLWHA) in Indonesia. The team conducted one-on-one in-depth interviews with 112 participants, 92 PLWHA and 20 health care workers. The HSDF is used to abstract study findings and the structure and central themes of the theoretical framework is supported throughout the study. Conceptual clarity is present from beginning to end. The authors address each primary and secondary concept within the HSDF, and special consideration is given to the drivers and facilitators of stigma marking which include a lack of understanding of HIV as well as fear associated with HIV, specifically the fear of contracting HIV through physical contact and the fear of social repercussions of associating with PLWHA. Stigma marking and manifestations are appropriately described, and these descriptions aid in the conceptualization of the themes presented. Stigma marking is placed on PLWHA because of their health condition. Stigma manifestations include stereotypes assuming to reflect the beliefs of PLWHA and prejudice against PLWHA in the form of anger, disgust, and fear (Fauk et al., 2021).

In their 2019 research study, Ferraz et al. conducted semi-structured in-depth interviews to explore how AIDS-related stigma affects the decision to use non-occupational post-exposure prophylaxis (nPEP) for

HIV after sexual contact. The study included 59 HIV-negative participants in Brazil who voluntarily sought nPEP treatment. Thematic analysis revealed three categories of how stigma influenced participants' experience with nPEP: 1. fear of being incorrectly labeled a person living with HIV/AIDS (PLWHA); 2. the wish to keep certain facts of private life confidential; and 3. lived experiences of stigma marking resulting from the use of nPEP (Ferraz et al., 2019). The HSDF is logically used throughout the study, and results satisfy the prescribed flow of drivers (fear of infection and revealing sexual behaviors) and facilitators (availability of and access to nPEP) through stigma marking (AIDS-, sexuality-, and gender-related stigmas), experiences (fear of being labeled a PLWHA and facing stigma because of sexual identity and practices), and manifestations (facing stigma in health care settings and sex work experiences and being prejudicially labeled as risky to sexual partners) to social and health outcomes (continuing inadequate knowledge of nPEP and decreased quality of life and social confidence during nPEP use) (Ferraz et al., 2019). Conceptual clarity is consistent with the original framework with one exception: experienced discrimination as described in this study is not obviously linked with legal ramifications related to discrimination. Because Stangl et al. (2019) clearly differentiate the two concepts- experienced discrimination includes stigmatizing behaviors that carry legal repercussions for the responsible individual(s), and experienced stigma includes stigmatizing behaviors that do not carry legal repercussions for the responsible individual(s), the concept of experienced stigma would be more appropriate than experienced discrimination for use in this study.

Logie and colleagues (2021) conducted a qualitative study to explore lived experiences and perspectives of HIV testing in refugee youth living in Uganda. Data were collected through focus group sessions with the youth and through interviews with key informants from refugee agencies as well as HIV care providers in the refugee community. Concepts are clearly defined, and relational statements are consistent throughout the study and with the original theoretical framework. The HSDF informs the research and specific drivers and facilitators related to HIV testing in refugee youth are revealed. Drivers include attitudes and beliefs that perpetuate vulnerability (misinformation that HIV only happens to some people), fear of testing positive for HIV, and blame and shame for sexual activity. Facilitators include confidentiality concerns as well as legal, institutional, and community influences that support HIV prevention or increase HIV risk (Logie et al., 2021). While some studies combine drivers and facilitators as overlapping concepts, the authors of this study clearly differentiate drivers and facilitators which enhances the understanding of and relationships between the concepts.

In their 2020 report, Ransing and colleagues elucidated real-life experiences of psychiatrists from 13 countries. Their investigation echoes the findings of the three previous studies related to stigma and the central tenets of the HSDF. Ransing et al. (2020) utilize the HSDF to explore COVID-19 related stigma experienced by their patients; drivers and facilitators cause stigma marking, manifestations, and outcomes that have major health and social impacts. Drivers include fear, beliefs, and blame. Facilitators comprise social inequalities, beliefs, lack of regulation, and social media use along with media influence. A flaw in this report is the methods for data collection and data analysis are never discussed which weakens the empirical support of the source.

Peterson et al. (2021) undertook a scoping review to identify what is known about stigma related to human papilloma virus (HPV) infection, HPV vaccination, cervical cancer, and cervical cancer screening. After application of inclusion and exclusion criteria, the team reviewed 14 research papers (eight qualitative, four quantitative, one mixed-method, and one from data acquired from a blog post) and utilized the Preferred Reporting Items for Systematic Review and Meta-Analyses Extension for Scoping Review (PRISMAS-cR) checklist to present themes and concepts. The primary and secondary concepts in the three domains

of the HSDF were supported and consistently used throughout the scoping review. Stigma marking was the most common concept extracted from the review (13/14 articles included stigma marking), and stigma experiences was the least common concept extracted (4/14 articles) (Peterson et al., 2021). The authors succeed in detailing the concepts and conceptual relationships in the first three domains of the framework (1. drivers and facilitators, 2. stigma marking, 3. stigma manifestations). While not described as part of the HSDF within the review, the outcomes as well as social and health impacts of health-related stigma are identified at the beginning of and throughout the study: HPV infection, cervical cancer, HPV vaccination, and cervical cancer screening (Peterson et al., 2021).

Most recently, Douglass et al. (2022) developed a protocol informed by the HSDF to guide a systematic review of literature related to stigma associated with mental health conditions and alcohol and other drug use in people from migrant and minority groups. The HSDF is appropriately utilized in the creation of the protocol. Key concepts and relational terms are consistent throughout. The results of this systematic review cannot be analyzed as the review has not yet occurred or been published, but the organizational framework for the review is aligned with the prescribed structure of the HSDF.

Table 3

Research studies used when determining empirical support of the HSDF

Author (Year)	Purpose	Sample	Concepts	Analytic Technique	Result
Douglass et al. (2022)	To critically appraise and synthesize qualitative research to reveal how stigma associated with mental health conditions and alcohol and other drug (AOD) use effects people from migrant and minority groups.	N/A – this article offers a protocol to guide a systematic review of literature using the HSDF as a guide	Drivers Facilitators Intersecting stigma Mental health conditions Alcohol and other drug use (AOD) Stigma marking Stigma manifestations Stigma experiences Stigma practices PRISMA-P Internalized stigma Intersectionality Habitus Symbolic power	Critical appraisal using the Joanna Briggs Institute Critical Appraisal Checklist for qualitative studies.	The HSDF is appropriately utilized in the creation of a protocol to guide a systematic review. Key concepts and relational terms are consistent throughout the piece.
Fauk et al. (2021)	To describe the perspectives and personal experiences of healthcare providers caring for people living with HIV/AIDS (PLWHA)	Indonesia N=112 92 participants living with HIV/AIDS 20 healthcare providers	Health stigma Discrimination Drivers Facilitators Stigma marking Prejudice Stigma manifestations Negative labeling Separation of personal belongings Avoidance Denial of treatment Rejection of PLWHA Stereotypes	One-on-one in-depth interviews for data collection. Data analysis was guided by Ritchie & Spencer's (1994) analysis framework for qualitative data.	The HSDF is used to abstract study findings and the study supports the structure and central themes of the HSDF. Drivers and facilitators are identified and clearly elucidated according to their function. Stigma marking and manifestations are appropriately utilized and aid in the conceptualization of the themes presented.

Author (Year)	Purpose	Sample	Concepts	Analytic Technique	Result
Ferraz et al. (2019)	To explore how AIDS-related stigma affects the experience of using non-occupational post-exposure prophylaxis (nPEP) for HIV after sexual contact.	Brazil N=59 59 HIV-negative participants that voluntarily sought nPEP	AIDS-related stigma Antiretroviral drugs (ARVs) Pre-exposure prophylaxis (PrEP) Non-occupational post-exposure prophylaxis (nPEP) Stigma associated with living with HIV Stigma associated with belonging to a sexual minority Stigma associated with sex work Drivers Facilitators Stigma marking Stigma experiences Stigma manifestations Stigma outcomes Experienced discrimination Internalized stigma Perceived stigma Anticipated stigma Stigma practices Stereotypes Prejudice Discriminatory attitudes	Semi-structured in-depth interviews for data collection. Interviews were recorded, transcribed, and reviewed by a researcher. Thematic analysis was performed and resulted in three categories of how stigma influenced participants' experiences with nPEP.	Thematic analysis revealed three categories of how stigma influenced participants' experience with nPEP: 1. Fear of being mistaken for a person living with HIV-AIDS (PLWHA); 2. The desire to keep certain facts of sexual life confidential; and 3. Lived experiences of stigma marking resulting from the use of nPEP. The HSDF was appropriately utilized, and the results of the study fully satisfy the flow of drivers and facilitators through stigma marking, experiences, manifestations, to social and health outcomes. Experienced discrimination was not consistently linked with legal ramifications related to discrimination, so experienced stigma may have been more appropriate there. They define experienced discrimination as 'one's suffering stigmatizing behaviors' (p. 110).
Author (Year)	Purpose	Sample	Concepts	Analytic Technique	Result
Logie et al. (2021)	To explore experiences and perspectives toward HIV testing, including HIV self-testing, in urban refugee youth	Uganda N=49 44 refugee youth participants 5 key informant group participants	Stigma processes Perceived or felt-normative stigma Enacted stigma Internalized or self-stigma Drivers Facilitators Stigma experiences Intersecting stigma	Five focus group sessions with refugee youth. Five interviews with key informants from government, non-government, and community-based refugee agencies, as well as HIV care providers in the refugee community. Interviews and focus groups were conducted in native languages and then translated and transcribed in English. Transcripts were coded using NVIVO software, inductive and deductive themes were exposed during thematic analysis.	The HSDF informs this study to reveal specific drivers and facilitators related to HIV testing in refugee youth. Stigma drivers and facilitators result in the study findings. Drivers include attitudes and beliefs that perpetuate vulnerability (misinformation that HIV only happens to some people), fear of testing positive for HIV, and blame and shame for sexual activity. Facilitators include confidentiality concerns as well as legal, institutional, and community influences that support HIV prevention or increase HIV risk. Drivers and facilitators are clearly differentiated.

Author (Year)	Purpose	Sample	Concepts	Analytic Technique	Result
Peterson et al. (2021)	A scoping review to determine what is known about stigma associated with HPV infection and vaccination, and cervical cancer and screening	USA 14 research papers	Drivers Positive facilitators Negative facilitators Stigma marking Stigma practices Stereotyping Prejudice Stigma experiences Stigma manifestations Perceived or anticipated stigma	Themes revealed in the review are presented usitng PRISMAScR	Major concepts in the three domains of the HSDF were supported and consistently applied throughout this scoping review.
Ransing et al. (2020)	To explore COVID-19 related stigma (COS) and discrimination.	13 countries No sample, this is a descriptive letter based on the real-life experiences of psychiatrists from 13 countries.	Drivers Facilitators Intersecting stigma Stigma experiences Stigma practices Secondary or associative stigma COVID-19 related stigma (COS)	None	This descriptive article echoes the findings of previous studies and the central tenets of the HSDF. The HSDF is utilized appropriately; drivers and facilitators cause stigma marking, manifestations, and outcomes that have major health and social impacts. Drivers include fear, beliefs, and blame. Facilitators include social inequalities, beliefs, lack of regulation, and social media use along with media influence.

Logical Adequacy

Determining the logical adequacy of a theory is complex and specific to linguistic philosophy (Walker & Avant, 2018). Because this is an analysis of a middle range theory useful in nursing, it will focus on four specific components of logical adequacy: 1. predictions made from the theory independent of content, 2. agreement of scientists on the predictions, 3. coherence of the theory among scientists, and 4. the presence of any logical fallacies (Walker & Avant, 2018).

Based on Stangl and colleague's (2019) seminal work and supported with empirical evidence by six groups of scientists in the past four years, predictions can be made from the HSDF independent of the content of each study. Drivers and facilitators lead to stigma marking. Stigma marking with one health-related stigma can lead to stigma manifestations, or marking with intersecting stigmas (additional stigmas including stigmas unrelated to health, such as gender, occupation, and sexual orientation) can result in stigma manifestations. Manifestations include stigma experiences for those being stigmatized and stigma practices from those imparting the stigma as well as those experiencing it. When manifestations such as experienced stigma and discrimination and prejudicial practices result, health-related outcomes can follow. Outcomes connected to the stigmatized population include diminished legal justice, altered access to health care services including primary level health care, less adherence to medical treatment, and decreased resilience and advocacy in the affected individual or population (Stangl et al., 2019). Along with affecting stigmatized populations, stigma manifestations can affect outcomes for organizations and institutions such as law enforcement practices, laws and policies, the accessibility of quality health services, and social protections (Stangl et al., 2019). These outcomes have the potential to culminate in general health and social impacts that can jeopardize quality of life and increase morbidity, mortality, and the incidence of negative health experiences (Stangl et al., 2019).

The format of the HSDF remains consistent throughout its use, from its origination through the empirical evidence analyzed for this report. In the six articles reviewed for this analysis, scientists use the HSDF as intended to make predictions about the theory and the content of their research. No outliers or opposing views to the structure or use of the theoretical framework were identified, and no obvious modifications have been made to the originally proposed framework.

Analysis revealed no obvious logical fallacies in the original framework or the evidentiary articles utilizing and supporting the framework. Walker and Avant (2018) explain that deductive logical fallacies occur when the premises on which the theory is based do not match with the conclusion(s) of the newer theory. Stangl et al.'s (2019) HSDF is based on previous stigma research, conceptual frameworks, and theoretical frameworks related to a single health condition or attribute and it is deduced from this research to form the current framework. The premises on which the HSDF is based align with the current format; therefore, logical adequacy is achieved. Furthermore, subsequent literature using the HSDF as a theoretical basis applied the framework in its original form with no major modifications or revisions.

Usefulness

Usefulness of a theory is determined by whether it significantly enhances a scientific knowledge base (Walker & Avant, 2018). The HSDF has generated several research studies since its inception just three years ago. The theory is relevant to a wide range of individuals and situations which is the major difference between it and related historical frameworks. Instead of focusing on stigma and discrimination related to a single health condition on one side of the stigma equation, the HSDF is applicable to both the *stigmatizer* (the one placing stigma on another or on a health condition) and *stigmatizee* (the one being stigmatized) at once, without emphasizing this dichotomy, across a wide range of health conditions and situations (Stangl et al., 2019).

Finally, the HSDF has the potential to influence not only nursing practice, education, research, and administration, but also general health and policy related practice, education, research, and administration. Understanding the relationships between health-related stigma and health and social outcomes at the individual and community levels can empower providers, researchers, and lawmakers to focus on the root causes of health-related stigma and discrimination in order to combat it at the health care delivery level. The general transcultural applicability of the HSDF to human caring, intervention, and evidence-based improvement makes it extremely useful to the global health care community by providing a clear description of the path that health-related stigma and discrimination can take to potentially influence health outcomes.

Generalizability and Parsimony

Generalizability refers to how broadly a theory can be used in explaining a phenomenon based on the boundaries and empirical support of the theory (Walker and Avant, 2018). As detailed previously, the HSDF can function as a middle range theory because it contains practice-level implications without being limited to one diagnosis, population, or discipline. The authors of the theoretical framework intend it to be applied broadly for use across disciplines and health conditions (Stangl et al., 2019). The HSDF has the potential to be widely generalizable; however, it has not met that potential yet based on use in current literature. Of the six articles reviewed for this analysis, half were related to HIV/AIDS. Scientists should utilize the HSDF when studying stigma related a range of health conditions instead of just traditionally stigmatized health conditions. When this is achieved, the HSDF will be more generalizable. Additionally, the empirical evidence provided in this analysis was generated from qualitative research and literature

which inherently limits its generalizability. Quantitative research should be informed by the HSDF to yield reproducible studies that generate solid results and knowledge.

Parsimony is achieved when a theory is explained simply and concisely without losing the detailed structure or completeness of the theory (Walker & Avant, 2018). In the introductory HSDF article, Stangl et al. (2019) define the concepts, describe the relationships between concepts, and diagram the conceptual flow through the framework simply and without superfluous explanation. Empirical support of parsimony is evident in the literature reviewed for this analysis. Scientists utilized the HSDF as intended to define and relate the health conditions and social situations under study and the result is clear, concise, and aligned with the central flow of the HSDF. No revisions or modifications to the original HSDF published in 2019 were found which strengthens the argument that the framework is parsimonious.

Testability
Walker and Avant (2018) opine for a theory to be accepted and accurately utilized, it must be testable. Testability is supported with empirical evidence of hypothesis generation and testing which leads to theory validation or modification (Walker & Avant, 2018). The HSDF has not reached full testability at this time for several reasons. It is a newer theoretical framework originating in 2019, and it has been utilized in qualitative studies focusing on already highly stigmatized health conditions which limits its generalizability. Furthermore, the HSDF is difficult to find in databases and online when searching for research-based nursing theoretical frameworks. Increased availability and awareness of the HSDF, along with using it in structured quantitative research will make it more useful in future research which will increase its testability.

Theory Evaluation
While the purpose of theory analysis is to reach understanding, the purpose of theory evaluation is to make a decision about the theory that could possibly lead to action (Walker & Avant, 2018). This section will utilize Peterson and Bredow's (2019) middle range theory evaluation process which incorporates several elements of internal criticism and external criticism to evaluate the HSDF.

Internal Criticism
Internal criticism of a theory includes evaluating the adequacy, clarity, consistency, and logical development of a theory as well as the level of theory development (Peterson & Bredow, 2019). The HSDF addresses the topics of stigma and discrimination in health care and relates these topics to general social health outcomes. The concepts used to build the theory are clearly defined and are plainly related to one another throughout the framework. Conceptual meaning and relational statements are consistent from the original framework and throughout the six articles reviewed for this evaluation. Stangl et al. (2019) build on previous scientific literature to deliver an innovative theoretical framework to guide intervention and research across a variety of health conditions from the perspective of the causes and effects of health-related stigma rather than the dichotomous perspective of either those perpetuating health-related stigma or those experiencing health-related stigma. Because the HSDF is useful to a range of disciplines and health conditions, the practice level utility of the framework extends beyond empirical theory to middle range theory in that it applies to general health-related stigma rather that stigma associated with one health condition.

External Criticism
External criticism of a theory encompasses several elements of evaluation including the theory's complexity, level of discrimination, reality convergence, pragmatism, scope, significance, and utility (Peterson

& Bredow, 2019). The HSDF incorporates four primary concepts and nine secondary concepts derived and extended from the primary concepts. These concepts are clearly defined and consistently used throughout the theory. Furthermore, empirical evidence confirms the consistent nature of the concepts across a range of research studies. Because Stangl and colleagues (2019) achieve parsimony with the framework, the HSDF is appropriately complex.

The level of discrimination evident in the HSDF is ambiguous. Further research is needed to determine if the HSDF alone can produce hypotheses and results that could not be met utilizing other nursing theories (Peterson & Bredow, 2019). Reality convergence is achieved by the HSDF because the theory's underlying assumptions represent the real world and real-life situations. Health-related and illness-related stigma and discrimination are present hurdles in today's world and the HSDF accurately and simply portrays these phenomena as understood by the general reader (Peterson & Bredow, 2019).

The HSDF is pragmatic because it can be utilized in the real world (Peterson & Bredow, 2019) as evidenced by the empirical support presented in this paper. The scope of the HSDF is a continuum from practice-level implications to global ideology; however, it is most consistently applied in middle range research. The HSDF displays preliminary real-world utility because it is useful to nurses in research and problem solving in practice, and this utility will be strengthened when the theory is supported through quantitative research studies contributing to hypothesis building (Peterson & Bredow, 2019).

Conclusion

Stangl et al. (2019) developed the HSDF to guide intervention and research of a variety of health conditions with the ability to compare findings, analyze results, and implement evidence-based change across health conditions and patient populations. The purpose of HSDF utilization is to recognize and stop health-related stigma, or to minimize potential negative health outcomes associated with health-related stigma and discrimination. The HSDF is a valuable guide for transcultural scholars and practitioners because it can influence a variety of stigma research. The results and implications of such research can inform how health care practitioners care for individuals that suffer from traditionally stigmatized health conditions with the overall goal to improve health outcomes.

Future health-related stigma research should utilize the HSDF across health conditions and populations. The HSDF can be generalized to relate to a variety of illnesses, social and cultural groups, and political causes while functioning and guiding specific interventions at the practice level. Interestingly, half of the articles reviewed for empirical support (3 of 6) focused on stigma related to HIV/AIDS, and these three articles were the only research studies in the group. A central tenet of the HSDF is its applicability across a range of health conditions; therefore, future research should focus on a variety of health conditions to expand the influence of the HSDF beyond traditionally stigmatized health conditions.

Further research and work utilizing the HSDF is necessary to strengthen its benefits and usefulness as well as to modify and enhance it as needed. Quantitative research is needed to determine if the HSDF alone can produce hypotheses and results that could not be met utilizing other nursing theories which would help to measure the level of discrimination (Peterson & Bredow, 2019). To further testability, the HSDF needs a greater presence in health-related databases, and this will be achieved by increased use and scrutiny.

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Book Review: Cherry, S. M. (2022). *Importing care, faithful service: Filipino and Indian American nurses at a veteran's hospital.* Rutgers University Press.

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In the United States, many nurses who were born outside the U.S. are Filipino or Indian, and many Filipino American and Indian American nurses are also devoutly Catholic. However, few studies about these nurses have explored how their Catholic faith informs their work. In his new monograph, sociologist Stephen M. Cherry examines Filipino American and Indian American nurses working in a Veterans Affairs (VA) hospital in Houston, Texas. The nurses confront numerous challenges at the VA. For one, veterans suffer multiple comorbidities—higher rates of heart disease, alcohol use disorder, as well as mental health conditions such as traumatic brain injury and post-traumatic stress disorder (PTSD). Additionally, the VA health system has come under scrutiny for inefficiency and long wait times. Furthermore, Filipino American and Indian American nurses often face racism and xenophobia; their patients refuse their care and request "American" (White) nurses instead. Amid these challenges, Cherry explores why these nurses continue working at the VA. The reasons reach beyond government employment benefits, which the nurses say have fallen short of their expectations anyway.

Cherry's central argument is that Filipino American and Indian American nurses' Catholic faith motivates them to care for veterans and to continue working at the VA. Their faith sustains them when they face challenges with the VA system or their patients. Their faith also guides their clinical practice as they incorporate a spiritual, interpersonal aspect to caring for veterans. Their faith also compels them to perform civic engagement outside of the hospital as they run health screenings in the community or organize gift drives around Christmas for the homeless. Cherry shows that for Filipino American and Indian American nurses, "[…] Catholicism animates their approaches to patient care while at the same time compelling them to take civic action on behalf of American veterans both inside and outside of the hospital" (p. 7).

Originally, Cherry designed the study as an ethnography and planned to observe nurses at the VA hospital. However, as the VA came under federal investigation in 2014, Cherry could no longer enter the hospital as a researcher. Instead, he pivoted to triangulating data from Filipino American and Indian American nurses, as well as from veterans. From 2014 through 2018, Cherry interviewed, surveyed, and held focus groups with 116 healthcare professionals, including 48 Filipino American nurses and 39 Indian American nurses (p. 159). Importantly, all of the nurses are U.S. citizens, as U.S. citizenship is required for employment at the VA hospital (p. 22). About 10 percent of the foreign-born nurses participating in Cherry's study served in the U.S. military themselves (p. 61). Cherry also interviewed 35 veterans about their care at the hospital and monitored blogging communities among veterans and Filipino American and Indian American nurses (p. 23).

One of the book's important contributions is the honest, candid (and sometimes disturbing) accounts of the nurses' experiences with racism and xenophobia from their VA coworkers and from veterans. Cherry quotes a White nurse saying that her Filipino and Indian coworkers "remind our veterans of their enemies in war" (p. 46), referring to the veterans' trauma fighting in Korea, Vietnam, and Afghanistan (despite the fact that these countries are not the Philippines or India). Cherry also describes a visit to the VA hospital when he was riding an elevator with two veterans. A Vietnamese healthcare professional entered the elevator, and Cherry recounts that the two veterans "took a dramatic step back and moved to one side of the elevator," and when Cherry asked the veterans what they thought about that person, one said, "[…] someone needs to realize that this hospital has way too many foreigners working in it" (p. 47).

The book is organized in chapters that explore the different ways that faith informs these nurses. Establishing background to nurse migration, Chapter 1 traces the trend of the recruitment of foreign-educated nurses (especially from the Philippines and India) to fill nursing shortages and key federal immigration legislation that has facilitated their recruitment. As Filipino nurses migrate from a largely Catholic country, and as Indian nurses commonly migrate from Kerala, a state in India that is predominantly Christian, Cherry also introduces faith, spirituality, and religion as unexplored topics as related to Filipino and Indian nurses in the U.S. before turning to the Veterans Affairs healthcare system's inefficiency. Chapter 2 dives into historical background about U.S. colonialism in the Philippines and British colonialism in India which ushered in professional nursing as well as Christian missionaries shaping cultural beliefs in nursing as a service. While previous work has treated these histories in the Philippines and India separately, Cherry draws striking parallels between the two. Chapters 3 and 4 focus on the particularities of U.S. veterans as a patient population—their complex comorbidities as well as the distrust of foreign-educated nurses among some veterans. In Chapter 5, Cherry shows how Catholicism motivates Filipino American and Indian nurses to stay at the VA hospital despite these challenges. Then, in Chapter 6, Cherry highlights how their faith also spills over to these nurses' civic engagement outside of the hospital as they run health fairs to organize events to benefit veterans and the homeless. Finally, in Chapter 7, Cherry projects future nursing shortages that may require the U.S. healthcare system to continue to recruit foreign-born nurses, a trend that Cherry foresees as diversifying the nursing workforce to keep pace with the diversifying general U.S. population.

The book presents an inaccuracy worth correction. Two times in the book, Cherry states that the U.S. has never been at war with the Philippines or India (p. 55, 75). But that is incorrect. After the U.S. won the Spanish-American War in 1898, it acquired the Philippines (and Puerto Rico, Guam, and Cuba) from Spain. Then, the U.S. fought the Philippines in the Philippine-American War from 1899 until 1902, when it overpowered the Philippines and established a government there.[1]

Conceptually, Cherry discusses faith, religion, spirituality, and spiritual care interchangeably. However, nurses interested in the specifics of spiritual care might have appreciated more detail, especially given that Cherry cites nursing research about spiritual care. It's unclear whether spiritual care can entail eliciting long-term life goals, active listening, or other examples of care that may not necessarily seem Christian or religious, but that may prompt the patient to reflect on their spirituality or seek deeper meaning and purpose (p. 98-99).

[1] Although often overlooked, the Philippine-American War has been documented in common reference materials such as encyclopedias and explored by academic historians. For the ways that the Philippine-American War also contributed to the racialization of Filipinos as enemies during the colonial period, see Paul A. Kramer, *The Blood of Government: Race, Empire, the United States, & the Philippines* (Chapel Hill: University of North Carolina Press, 2006). For another classic work on the Philippine-American War, see Stuart Creighton Miller, *Benevolent Assimilation: The American Conquest of the Philippines, 1899-1903* (New Haven, CT: Yale University Press, 1984).

The thorniest issue that Cherry tackles is the way that nurses rationalize veterans' racist or xenophobic biases as part of PTSD. Because the nurses may resemble other Asians, they sometimes wonder if their appearance triggers veterans' traumatic experiences of fighting in Asia. To Cherry's credit, the gray area is not simply his own interpretation; it's also the uncertainty and discomfort that nurses themselves feel on the receiving end of racism, xenophobia, or PTSD (p. 79). Also, Cherry cautions: "This by no means excuses veterans' behaviors and at times apparently racist or xenophobic outbursts, but it does further contextualize them" (p. 75). But nurses and Asian Americans need more than just context, especially as violence and physical abuse against them has peaked. Perhaps future scholarship, both theoretical and clinical or applied, could address racism and xenophobia as PTSD more critically and productively. Does PTSD hide racism, legitimize it, permit it? Does explaining veterans' reactions to Filipino Americans and Indian Americans in terms of a psychiatric diagnosis make it possible to "treat" racist attitudes? Nurses reading Cherry's book may be left searching for a deeper way to understand and address veterans' reactions to foreign-born nurses. But as Cherry's study suggests, it seems like these nurses must rely on their own faith and their own communities.

All the same, Cherry's book brings to the fore an explicit and important account of these nurses' feelings and frustrations working at the VA hospital—experiences overlooked in previous scholarship on foreign-educated nurses as well as in the news media critiquing the VA. Cherry connects new relationships among nursing shortages, Filipino and Indian nurses in the U.S., and Catholicism, weaving in the Catholic faith of these nurses as a motivation to keep working and caring for the VA and its patients.
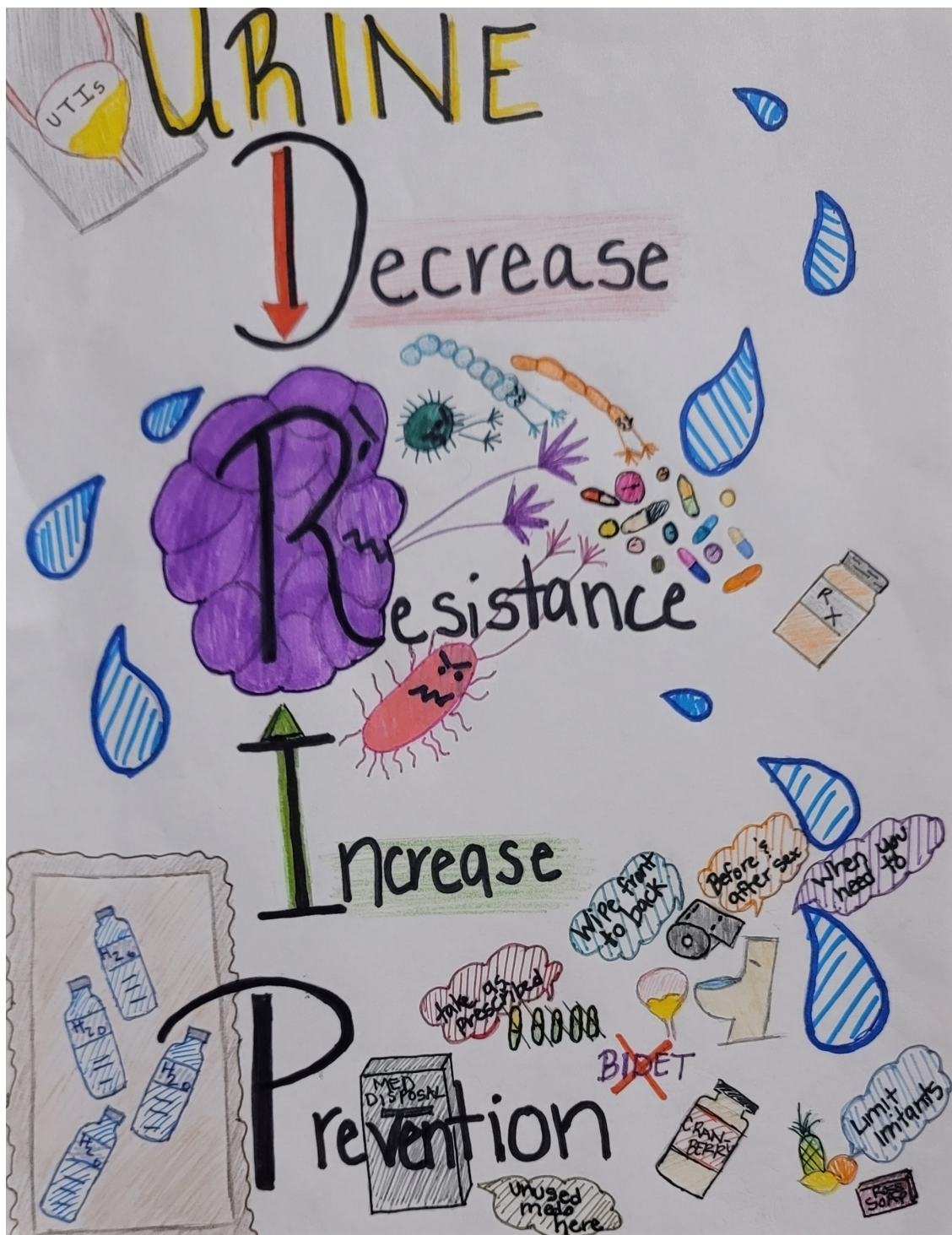
Art Submission: *Resisting Infections*
Sasha Morales, DNP, RN, APRN-CNP

The goal of my drawing is to represent my DNP project which focuses on the prevention of urinary tract infections (UTIs) to decrease antimicrobial resistance. The use of the acronym DRIP promotes both UTI prevention practices and antimicrobial stewardship to decrease antibiotic use and therefore antibiotic resistance. The image also addresses irritants which can contribute to patient-reported symptoms of increased urinary urgency with decreased voided amounts.

Addressing Socioeconomic Health Disparities: Challenges and Implications

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Abstract

This manuscript delves into the multifaceted ethical and philosophical challenges associated with socioeconomic health disparities. It provides a comprehensive exploration of the historical underpinnings of health disparities, emphasizing enduring themes that significantly influence the health outcomes of lower socioeconomic populations. The manuscript critically examines the ethical implications arising from these disparities, with particular attention given to the amplified challenges posed by the emergence of SARS-CoV-2. Additionally, the indispensable role of nurses in tackling these pervasive health disparities is elucidated, underscoring their unique position to drive transformative change and promote equitable healthcare access for all. Through an expanded discussion and analysis, this scholarly work offers valuable insights into the complex interplay between ethics, socioeconomic disparities, and the nursing profession's responsibilities in addressing these pressing issues.

Addressing Socioeconomic Health Disparities: Challenges and Implications

Health disparities are defined as systematic differences in health outcomes linked to a disadvantage associated with economic, environmental, or social factors (Office of Disease Prevention and Health Promotion, 2022; Penman-Aguilar et al., 2016). These health disparities denote avoidable and unfair inequalities between populations. Disparities can limit an individual or population's ability to achieve optimal health, often impacting other life dimensions, including financing, housing, food access, and education. These factors, identified as social determinants of health (SDOH), are complex, interacting with genetic, biological, behavioral, and environmental components to affect health (Centers for Disease Control and Prevention, 2021).

Addressing health disparities within the United States is a critical endeavor aimed at ensuring optimal health outcomes for all citizens (U.S. Department of Health and Human Services, 2023). However, numerous limitations hinder progress in this area, with socioeconomic status emerging as a significant challenge, particularly for high-risk and underserved populations (National Center for Health, 2016). Individuals with low socioeconomic status often face formidable barriers when accessing healthcare, hindering their ability to avail themselves of preventative care and manage chronic diseases effectively due to financial constraints and time limitations (Becker & Newsom, 2003; Dubay & Lebrun, 2012). These disparities have profound ethical implications for healthcare professionals, including nurses, who are committed to providing equitable, high-quality care and facilitating access to healthcare services for all individuals (American Nurses Association, 2015; Hassmiller & Wakefield, 2022). Moreover, health disparities under-

score persistent wrongs that perpetuate socioeconomic class divisions, thereby intensifying the ethical quandary confronting the nursing profession and those affected by such disparities (Szreter, 2003). Health disparities have far-reaching implications within the field of nursing. As nurses interact closely with patients, these disparities present ethical challenges that directly impact their provision of care. Nursing, as a fundamental discipline, emphasizes the delivery of quality care and equitable access to healthcare services for all individuals (American Nurses Association, 2015). However, health disparities undermine this core principle, creating a paradoxical situation where nurses strive to bridge the gaps in care but are impeded by systemic inequities. The existence of health disparities illuminates historical injustices that have enduring effects on socioeconomic divisions (Szreter, 2003). Consequently, nurses are confronted with the moral imperative to advocate for social justice, address disparities, and work towards eliminating the systemic barriers that perpetuate unequal access to healthcare services. By actively engaging in initiatives that promote health equity and striving for inclusive care, nurses can contribute to the advancement of a more just and equitable healthcare system for all individuals, irrespective of their socioeconomic status.

Gaining a comprehensive understanding of the obstacles presented by SDOH and effectively addressing these limitations through policy development is of paramount importance in enhancing health outcomes for all individuals. This scholarly paper aims to conduct a thorough examination of the impact of socio-economic determinants of health and the resultant health disparities on healthcare systems within the United States. To accomplish this, a literature review was undertaken, focusing on the historical context and relevant scholarly literature pertaining to the subject matter. Additionally, this manuscript delves into the ethical dimensions surrounding SDOHs. The primary objective of this article is to identify, analyze, and discuss the current challenges associated with this critical topic, while also proposing potential strategies and actions that can be undertaken by nurses, nurse educators, and nurse researchers to effectively address and mitigate these issues.

This article was guided by the conceptual framework proposed by Kuehnert et al. (2022) which elucidates the role of SDOHs in shaping nursing action towards the attainment of health equity. The framework explores the interconnectedness of six key SDOH factors with various environmental concepts, including the environment itself, individual and population factors, and planetary health-related quality of life. These factors are further examined in relation to the nurse's role and the development of policies. Within the nursing profession, interventions can be strategically implemented at different levels, namely upstream, midstream, and downstream, to effectively target and plan policy initiatives aimed at addressing health disparities and promoting equitable healthcare outcomes.

Background
This section highlights the extensive historical context of health disparities related to socioeconomic status, tracing back to the 1700s and encompassing factors such as socioenvironmental risk and mortality differentials. It emphasizes the growing recognition of the impact of social class on health outcomes and the emergence of health disparities for minority populations. Additionally, it acknowledges the challenges in defining health disparities and the limited effectiveness of past healthcare policies in addressing these inequities.

Historical Context
The historical context of health disparities related to socioeconomic status is extensive, though limited to written records. Dating back to the 1700s, there was documentation of individuals with increased

socioenvironmental risk factors having a higher frequency of cancer (Gibbons, 2005; Institute of Medicine Roundtable on Environmental Health Sciences & Medicine, 2002). Differences in mortality rates per social class were documented in England in 1840, with past reports noting that poverty was associated with increased mortality (Macintyre, 1997). Similarly, cases were made in Germany and France pointing to socioeconomic status and subsequent variations in class-specific opportunities that affected health, delineating an effect on mortality and morbidity (Amick et al., 1995).

By the 20th century, the social class difference was described to affect more than just the occupational aspect, demonstrating a clear impact on health and longevity throughout the lifespan (Mackenbach et al., 1989; McKeown et al., 1975). In 1985, a report released in the United States by the Secretary's Task Force on Black and Minority Health pointed to distinct health disparities for minorities in the country compared to the White population (Mayberry et al., 2000). Subsequent epidemiologic studies emerged shortly after that documented substandard care and health care access for individuals of low socioeconomic status, including a large percentage of the minority population (LaVeist et al., 1995; Naumburg et al., 1993; Oddone et al., 1993; Peterson et al., 1997; Peterson et al., 1994). These studies elucidate multiple obstacles encountered by minority populations across different healthcare domains. For example, Naumburg et al. (1993) identified minorities were less likely to be screened and diagnosed with hypercholesterolemia compared to White populations. Peterson et al., (1994, 1997) demonstrated Black individuals experiencing an acute myocardial infarction in the Veterans Affairs systems were less likely to undergo cardiac procedures compared to Whites. When examining prenatal care, LaVesit, Keith, and Gutierrez (1995) revealed Black women were less likely to receive adequate care compared to White women. Thus, by the 1990s, substantial evidence had been collected demonstrating that socio-environmental determinants of health impacted the quality of care received, life expectancy, health care costs, and health and functional limitations, all of which led to the development and increase in health disparities (Fiscella et al., 2000).

Defining Health Disparities

Despite the proof that health disparities related to socioeconomic status existed, defining the disparities remained variable and imprecise. Some argued that disparities were population-based, reliant on access to healthcare or environmental exposure, while others suggested disparities were dependent on race and ethnicity (National Academies of Sciences, 2017; Olden & White, 2005). Categorizing disparities has also been proposed, grouping by age, gender, geography, education, and wealth. While these attempts to define health disparities have helped to isolate the cause and highlight areas of need that should be addressed to improve or resolve the disparity, past actions in health care policy have been lacking.

Health Care Policy

In 2000, the World Health Organization (WHO) established the Commission on Macroeconomics and Health (CMH), which focused on understanding the financial impact of SDOH (WHO, 2013). Subsequently, the Commission on Social Determinants of Health (CSDH) was established in 2005, focusing on the "social gradient in health" to assess differences between health outcomes in countries by resources, wealth, and power (WHO, 2013). Improved health for all individuals became the precedence, reaching the United States as healthcare communities began incorporating SDOH considerations into their strategic plans. The Healthy People Initiative, initially introduced in 1980 by the U.S. Department of Health and Human Services (HHS), developed a national strategy promoting health and disease prevention focused on increasing the lifespan of all Americans and aiming to reduce health disparities (Singh et al., 2017). With new objectives set for each decade, population health has become increasingly important due to the necessity for understanding the reasons for persistent health disparities by groups within society and based on geographic areas.

Though the spotlight on SDOH helped to bring its impact on increasing health disparities to the forefront, the rising costs of medical care limited the impact of new initiatives as health outcomes could not keep up with spending (Centers for Medicare & Medicaid Services, 2021). Political disagreements and the COVID-19 pandemic have only escalated health disparities, and health care policy has become stalled, trapping the healthcare community in the center of a challenging situation.

Review of Literature

To first examine the association between SDOH and health disparities in the United States, a literature review was conducted. The purpose of the review was not to present information extensively, but to examine the body of literature demonstrating the impact of SDOH on health disparities on the individual, in healthcare, and in the nursing profession. Subsequently, the literature reviewed substantiates the profound implications of SDOH on overall health and health outcomes.

To review the literature the databases PubMed, CINAHL, and PsychInfo were searched using the keywords "social determinants of health," "health disparities," and "United States." The initial search did not impose a specific date range to capture seminal literature, but a subsequent restriction was applied to article published between 2013 and 2023 to examine more recent data. The inclusion criteria comprised peer-reviewed, full-text research article published in English, and given the relevance to policy implications, gray literature was also included in the review. A total of 1,220 literature sources were initially identified. Through screening, articles that were disease specific or condition-specific were excluded, resulting in inclusion of only articles that addressed the broad relationship between SDOH and health disparities. Findings were categorized into four SDOH variables that were determined to be key factors associated with health disparities.

Physical Environment

Health disparities secondary to socioeconomic factors are a well-researched topic (Braveman & Gottlieb, 2014). When examining geographic patterns associated with disparities, significant trends identify low-income and disadvantaged neighborhoods with poor health (Institute of Medicine Committee on Guidance for Designing a National Healthcare Disparities, 2002). Within these spheres, housing stability, as well as neighborhood safety, affect individuals. Safety goes beyond the impact of the physical atmosphere. Consider that 90% of the day for most individuals is spent indoors (U.S. Environmental Protection Agency, 1989). An environment free from irritants, such as mold and pollution, has a tremendous impact on health. Exposure to these types of chemicals is associated with an increased risk of developmental disorders, neurologic complications, cancers, and respiratory illness. Housing instability, including lack of temperature control, ventilation, and access to clean water, can increase disease risk, infectious disease transmission, and mental health concerns. For example, individuals exposed to poor ventilation and biologic allergens as they age have an increased risk of respiratory issues, including asthma (Baldacci et al., 2015).

Additionally, the literature points to the benefits of adequate space in generating a healthy setting (WHO, 2018). Overcrowding can lead to increased transmission of infectious disease, compound food insecurity, and has been shown to affect mental health. Lastly, stability in maintaining a safe and affordable residence can impact health, pointing to the poor effects housing instability and high housing costs have on mental health (Carrere et al., 2022). The opposite has been demonstrated for individuals who live in safe, affordable housing, showing positive effects on health.

Food Insecurity

Food insecurity, defined as the inability to provide food that will support a healthy and active lifestyle, can generate a wide range of adverse effects on health (Gundersen & Ziliak, 2015). For children, insufficient food can impact growth and development and affect mental health. Children raised in settings with food insecurity have an increased risk of anxiety, depression, attention deficit disorder, and behavioral problems. These increased behavioral problems, in turn, can affect performance in school. For adults with young children, food insecurity can lead to parental depression, anxiety, and poor caregiving practices, which can lead to mental and emotional deficits (Munger et al., 2016).

Access to Education

Education plays a significant role in shaping health outcomes for both adults and children. A lower level of education is associated with an increased prevalence of chronic conditions, higher disability rates, and overall poorer health (Laveist et al., 2023; Zajacova & Lawrence, 2018). The link between education and health goes beyond mere acquisition of knowledge, extending to the development of critical thinking skills, self-awareness, and a comprehensive understanding of health and its determinants (Hahn & Truman, 2015). This encompasses the mental and physical dimensions of well-being, highlighting the multifaceted impact of education on health outcomes for individuals of all ages.

Economic Stability

Economic stability is a crucial SDOH that influences the well-being of both adults and children, and it is intricately linked to housing, food, and education (U.S. Department of Health and Human Services, 2022). Individuals who enjoy stable employment are more likely to experience better health outcomes or have improved access to healthcare services. Additionally, research indicates that higher incomes are associated with increased life expectancy (Frakt, 2018). This correlation holds true across different age groups, as evidence suggests that households with stable, higher incomes exhibit better health outcomes regardless of age. Thus, economic stability plays a significant role in promoting health for individuals of all ages.

Overview of review findings

In summary, socioeconomic factors such as the physical environment, food insecurity, access to education, and economic stability significantly contribute to health disparities. Disadvantaged neighborhoods with poor housing conditions, lack of safety and exposure to pollutants negatively impact health outcome. Food insecurity has detrimental effects on both physical and mental health. Limited access to education is associated with increased chronic conditions and poorer overall health. Economic stability, including steady employment and higher incomes, is closely linked to better health outcomes. Addressing these social determinants of health is crucial for reducing disparities and promoting health equity. While the literature clearly delineates the obstacles imposed by SDOH, there are barriers that challenge the resolution of the core problems. Bush (2018) details the necessity to address the root cause of the health inequities, which reflects the underlying obstacles imposed by the SDOH factor. In this sense, only focusing on providing a stable house will not improve health, as overcrowding, lack of ventilation, inadequate plumbing, or unsafe neighborhood environments all interrelate and impact health. Additionally, research has demonstrated that children raised in these socioeconomic conditions have life struggles that pose challenges even once these children reach adulthood (Reiss et al., 2019). Thus, failure to address the root cause early in life can result in continued SDOH barriers and health effects through adulthood, demonstrating the lifelong effects imposed by SDOH barriers.

The Impact of COVID-19 on Socioeconomic Health Disparities

Examining current socioeconomic health disparities cannot be discussed without considering SARS-CoV-2. The pandemic dramatically changed an already struggling system, leading to a more significant divide in healthcare resources and access. For example, the closure of non-essential businesses led to the rapid escalation in several dimensions of SDOH (Russo et al., 2021). An estimated 9.4 million adults and 6.1 million children encountered food insecurity in the United States in 2020 (U.S. Department of Agriculture, 2022). By April 2020, it was estimated that 20.6 million people had lost their jobs (Soucheray, 2020). By 2021, when federal relief measures had been enacted, at least 10 million households reported falling behind on rent (Center on Budget and Policy Priorities, 2020). The pandemic demonstrated that while food, employment, and housing security may not be specifically medical, they can directly impact health and indirectly affect access to health care (Centers for Medicare & Medicaid Services, 2021).

Fortunately, the impact of COVID-19 on SDOH factors did not go unnoticed. The Centers for Medicare & Medicaid Services (CMS) focused on developing strategies that affected health outcomes and costs amid the pandemic (CMS, 2021). Health equity became a central focus, renewing interest in addressing SDOH dimensions in vulnerable populations. Despite this push to refocus on SDOH factors and health equity, the question that emerges as the pandemic moves toward an endemic infection is if enough was done at the height of the global health crisis to prevent further disparities and associated complications. Retrospectively, the answer is likely no. More action could have been taken to support the population, particularly those without the means to survive this health challenge unscathed. The detrimental impact on all populations could have been better predicted and actions taken to adjust for challenges imposed by the virus. However, it is often easier to make critical judgments of the actions or inactions after the fact. The world was unprepared for such a catastrophic event, and despite historical references to prior pandemics, many assumed a repeat of such devastation was not fathomable in their lifetime. The repercussions will be felt for generations, particularly in populations with greater SDOH barriers.

Health Disparities and Ethical Theory

Addressing health disparities entails navigating complex challenges, particularly due to the interconnectedness of health policies and social policies. As a result, the societal response to addressing health disparities necessitates a careful examination of the moral dimensions associated with this issue. Ethical theory plays a crucial role in understanding and assessing the moral concerns surrounding health disparities rooted in SDOH. In order to effectively address SDOH factors, it becomes essential to critically evaluate and potentially reform existing systems involved in the distribution of valued goods and resources. By incorporating ethical perspective and theories into the analysis, this manuscript seeks to provide a comprehensive understanding of the ethical implications inherent in the association between social determinants of health and health disparities. Such an examination will contribute to the development of ethical frameworks and policy interventions that can foster greater health equity and alleviate the burden of disparities within society.

Examining health disparities from ethical and theoretical frameworks generally points to similar themes exemplifying the morally wrong grounds such disparities are based. Kantian ethics, which argues for individual worth, considers health disparities ethically wrong, violating the individual right to basic respect due to all individuals (Jones, 2010; Papadimos, 2007). In this regard, it is imperative to recognize that everyone has basic needs, including healthcare, which must be met. Furthermore, when considering the inherent worth of all individuals and their existence not solely for the benefit of others, access to healthcare is regarded as a fundamental right (Papadimos, 2007). The Social Justice Theory, which first emerged

in the 19th century, surmises that all individuals should have equal access to wealth, privileges, and opportunities (Venkatapuram, 2019). Rawls's theory of justice expands on the liberal social justice theory, suggesting the need for just treatment of all members of society through the equal distribution of benefits and burdens (Rawls, 2001). In this line of thinking, Rawls argued that all things valued, ranging from wealth and income to social elements that generate self-respect, should be distributed for the benefit of all. Thus, each individual has an equal claim to these resources as they equivalate to fundamental rights and liberties. Even utilitarian thought, often met with negative criticism that fails to appreciate the significance of minority or disadvantaged groups, can argue for the ethical incorrectness of health disparities (Jones, 2010). Utilitarian ethics relies on the mindset that actions and access should be focused on maximizing the greatest good for the greatest number of people. When examined collectively, however, the minority is a rather large group of people and, from such a perspective, should be considered significant, necessitating the receipt of good health and access for the benefit of all individuals.

Several opposing arguments have been made against these theories. For one, some argue that individuals who make poor choices concerning their health should take the primary responsibility for those choices and not burden the whole of society with their health consequences (Jones, 2010). Thus, someone who drinks alcohol or smokes cigarettes should be responsible for addressing the complications imposed by that behavior. Others argue that the disparities generated along race/ethnic lines are related to cultural habits that increase their health risks (Jones, 2010). These habits, which are more prevalent in specific ethnic groups, are then not the responsibility of society to resolve. Lastly, it can be questioned how blind equality of resources is fair when access to those resources has not been earned. In this line of thinking, access to good health comes with hard work. To counter these arguments, however, how can one overcome the preexisting barriers imposed by historical and current society without good health? Furthermore, how can one have good health without housing and food security? How can a child, adolescent, or young adult improve their health into adulthood without access to resources that improve their well-being?

Despite the presence of these theoretical frameworks to aid in elucidating the imposed ethical challenges, one key element must consistently be considered. Social conditions cannot be separated from health-related issues, as the choice, access, or lack thereof, are directly linked to health status. No matter the argument or theory proposed, overcoming historical injustices and gaining secure access to health resources translates into a lifelong battle. Once it is attained, health access does not equal permanence. It must be maintained, often overcoming hurdles imposed by a complicated bureaucratic and political healthcare system.

Current Considerations for Health Disparities

When analyzing health disparities, it is critical to emphasize the fundamental considerations that must be evaluated, with a primary focus on ensuring access to quality care that promotes health and addresses chronic disease prevention as an essential right for all individuals. This indisputable argument is that good health holds inherent value, influencing daily life and future planning. Regrettably, the prioritization of larger, seemingly more significant matters often relegates addressing obstacles impeding access to healthcare to a secondary concern.

Health disparities perpetuate a historical system of injustices rooted in race, ethnicity, and socioeconomic factors. The persistence of these disparities underscores an ethical failure to rectify past wrongs. With each missed opportunity to enact systemic changes to SDOH in childhood, the repercussions reverberate

through adulthood, impeding health promotion and chronic disease prevention. Consequently, this leads to poorer health outcomes as individuals reach middle and late adulthood, with far-reaching impacts on society as a whole, including increased healthcare costs and the burden borne by families grappling with the subsequent disabilities resulting from poor health.

Unfortunately, the efforts to address health disparities in the United States have encountered persistent roadblocks. Despite being on the world's highest spenders on public health, the United States stands out among Westernized nations for its absence for a universal healthcare system (Bush, 2018; Zieff et al., 2020). Moreover, the rapidly escalating healthcare costs have exacerbated disparities, further deepening the divide between the affluent who can afford these expenses and the non-wealthy (Tomlinson, 2016). This economic disparity imposes significant costs on the system, with estimated direct medical expenditures related to health disparities ranging from $53 billion to $61 billion annually between 2003 and 2006 (Laveist et al., 2011).

Beyond the economic impact, health disparities have profound implications for longevity, morbidity, and mortality within the population. Black individuals, for instance, face disproportionately high mortality rates, particularly in infant and maternal mortality, with infants being twice as likely to die at birth and mothers three times as likely compared to non-Hispanic White infants and mothers (Hoyert, 2021; Mathews et al., 2015). Similarly, Hispanics, accounting for approximately 57 million individuals in the U.S. population, bear a disproportionate burden of several chronic diseases, including diabetes and chronic liver disease (Centers for Disease Control and Prevention, 2015). Additionally, the CDC estimates that Hispanics in the United States are three times more likely to be uninsured compared to the non-Hispanic White population. Recognizing the moral implications of these disparities is essential, and understanding their existence and effects serves as a critical step toward addressing their persistence.

Addressing health disparities thus necessitates acknowledging the fundamental importance of access to quality care, recognizing the historical injustices perpetuating these disparities, and confronting the systemic barriers that hinder progress. The United States must grapple with the challenges posed by its healthcare system, escalating costs, and the specific disparities faced by different racial and ethnic groups. Identifying and comprehending the existence of health disparities is essential for devising effective strategies to mitigate their impact and work toward achieving health equity for all individuals.

The Role of the Nurse in Addressing Health Disparities

For clinical nursing, resolving health disparities is a logical and necessary step. The complex nature of health disparities related to SDOH demands more than simple system-level changes to rectify the multitude of inequalities. National efforts should be directed towards the transformation of social practices, healthcare policies, and non-health institutions to effectively mitigate these disparities. In this regard, the conceptual framework proposed by Kuehnert et al. (2022) serves as a valuable guide, as it outlines the interconnectedness of six key SDOH factors with various environmental concepts, encompassing the environment itself, individual and population factors, and planetary health-related quality of life. This framework underscores the role of nurses and policy development in addressing health disparities linked to SDOH.

Nurses play a pivotal role in promoting health equity and addressing health disparities through their actions and interventions. Firstly, as patient advocates, nurses have a fundamental duty to amplify the concerns of patients, clarify health-related information, and guide their care. Furthermore, nurses' involve-

ment in policy development is crucial for enhancing healthcare access for all individuals. By translating the challenges voiced by patients into policy initiatives, nurses can identify and address barriers that impede optimal health outcomes. Given the substantial representation of nurses within the healthcare profession, their engagement in public health policy is essential to improve the health of the national population (Smiley et al., 2018). Moreover, nurses play a significant role in facilitating changes in patient behavior and lifestyles, which spans various areas of healthcare, including prenatal and postnatal care, care for the elderly, health promotion, chronic disease prevention, and mental health care (Oden et al., 2000).

To become more engaged in policymaking, nurses should not only focus on research and evidence-based practice but also establish networking relationships with other nursing professionals to create a cohesive voice (Oestberg, 2013). Additionally, fostering productive collaborations with local officials and state representatives is crucial for establishing credibility and affecting change (Abood, 2007). By joining forces with local, state, and national nursing organizations, nurses can leverage their collective strength to advocate for current issues, propose collective solutions, and collaborate with policy experts to draft written and oral statement for government hearings (Oestberg, 2013). Even modest time commitments towards policy development can serve as powerful tools for generating improvements in healthcare.

Cultural competence is another essential aspect of nursing practice that contributes to addressing health disparities. Core values and beliefs influence patients' health outcomes, and therefore, nurses must practice in a culturally competent manner. Patients who perceive a lack of cultural support may develop distrust towards their healthcare providers and the healthcare system as a whole (Samson, 2016). Respecting the opinions and wishes of each patient plays a pivotal role in fostering culturally sensitive relationships. To cultivate cultural competence, nurses should actively seek knowledge about different cultures and remain mindful of their own biases and prejudices (Murphy, 2011). Increased awareness of cultural elements enhances communication between nurses and patients, which is a fundamental component of providing quality care (Kaihlanen et al., 2019). Nurses can assess their cultural competence through various self-assessment tools and pursue cultural competence certification programs offered by universities and independent organizations (Truong et al., 2014). Additionally, learning new languages or utilizing approved translators can personalize care and facilitate more effective patient interactions. Developing these cultural competence skills is crucial for generating patient-centered and action-oriented solutions, as well as understanding the underlying beliefs that influence patient care and treatment adherence.

Establishing a therapeutic and trusting relationship between nurses and patients is paramount to address health disparities effectively. Without such a relationship, patients may be hesitant to seek ongoing care, often resorting to seeking treatment only in emergency situations. The healthcare systems and hospital settings can be overwhelming for patients, with complexities such as medical jargon, intricate costs, and coverage policies. Nurses are uniquely positioned to help patients feel more at ease and foster a healthy nurse-patient relationship from the outset, enabling them to gather critical information about the patients' health needs and care preferences. This necessitates demonstrating empathy, respect, and understanding while validating patients' concerns (College of Nurses of Ontario, 2019; Feo et al., 2017). Active listening further fosters trust, respecting patients' privacy and time (College of Nurses of Ontario, 2019). The ability of patients to trust nurses in navigating the often-confusing healthcare system is essential in addressing health disparities.

The ultimate effectiveness of nursing actions and interventions in addressing health disparities can only be determined by successfully resolving each disparity. This ambitious goal requires concerted efforts to address each socioeconomic factor and eliminate the obstacles that hinder good health within each realm. Despite the formidable challenges posed by the current state of health and politics in the nation, active involvement in policy development remains a critical step for nurses. Through engagement at the state and national levels, nurses can advocate for improved access to basic healthcare needs and address SDOH factors that impact health. While individual efforts to communicate with local representatives and senators are crucial, supporting organizations that are already committed to the cause can also yield significant impact.

Conclusion

The future role of nurses in addressing health disparities is of paramount importance and necessitates their active engagement as patient advocates, healthcare providers and nursing researchers. Nurses have a unique vantage point at the bedside, witnessing firsthand the challenges and barriers that contribute to health disparities. By actively voicing these concerns, nurses can shed light on SDOH that underlie these disparities and advocate for equitable healthcare for all individuals.

Ethical considerations also come into play when examining the association between SDOH and health disparities. It is ethically imperative for nurses to recognize that health disparities are not solely individual health outcomes, but rather reflect broader systemic issues rooted in social, economic, and environmental factors. This recognition calls for a comprehensive approach that extends beyond the traditional scope of healthcare delivery and embraces the principles of social justice and equity. Nurses, as advocates for patient well-being, must address the underlying determinants of health disparities to ensure fairness, justice, and equal access to healthcare resources and services.

In light of the global nature of health disparities, it is essential for nurses to consider the broader context and current global considerations in their efforts to address disparities. Health disparities are not confined to specific regions or populations; they transcend geographical boundaries and affect individuals worldwide. Nurses can contribute to the global conversation on health disparities by participating in research, policy development, and collaborative initiatives that promote health equity and reduce disparities on a global scale. Recognizing the interconnectedness of health and well-being, nurses can engage in international collaborations to share best practices, advocate for polity changes, and promotion cross-cultural understanding in healthcare delivery.

In summary, nurses have a pivotal role in addressing health disparities by actively advocating for patients, providing equitable care, and conducting research. It is their ethical duty to address the social determinants of health and work towards eliminating disparities. By recognizing the global impact of health disparities and engaging in collaborative efforts, nurses can contribute to the advancement of health equity on a global scale. The pursuit of good health as a basic right requires collective action and unwavering commitment from nurses to address health disparities and promotion equitable healthcare for all (Olshansky, 2011).

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