MOVING FROM INJUSTICE TO EQUITY: A TIME FOR THE PHARMACY PROFESSION TO TAKE ACTION

REVIEW

Developing the “Upstreamist” through Antiracism Teaching in Pharmacy Education

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Objective. To present antiracism teaching as a key modality and an upstream approach to addressing health disparities in pharmacy education. Relevant theoretical frameworks and pedagogical strategies used in other health disciplines will be reviewed to present how antiracism curricula can be integrated into pharmacy educational outcomes.

Findings. Various disciplines have incorporated antiracism pedagogy in their respective programs and accreditation standards. While challenges to implementation are acknowledged, structural racism continues to compromise health outcomes and should be centralized when addressing health disparities.

Summary. Pharmacy curricula has explored and implemented cultural competency as a means to address the social determinants of health. By intentionally addressing racism in the context of health disparities, student pharmacists will further acknowledge racism as a public health issue and a systemic barrier to patient-centered care.

Keywords: antiracism, pedagogy, health disparities, educational outcomes

INTRODUCTION

The concept of race and the consequences of racism in the health care system can be a difficult topic to broach. Arguably, pharmacy and other disciplines often focus broadly on cultural competency or cultural humility in health disparities teaching. Some programs may offer content that challenges implicit bias, using terms such as “microaggressions” in order to define isolated instances of racism and discrimination. Implicit bias teaching, however, may not account for the ultimate outcomes that result from one’s beliefs/actions or explain the origins of such biases. By concentrating on the aforementioned topics, instructors could potentially overlook the historical and present-day intentionality of structural racism, including the deleterious health outcomes that can occur as a result.

While the participation of pharmacy programs in antiracism teaching is not nascent, literature surrounding pedagogical methods and the impact of such teachings on student views and behaviors does not presently exist. Although competencies and educational models in pharmacy education have helped shift teaching toward understanding racial discrimination, work still remains. The concept of race as a social determinant of health is presently inexplicit within these competencies, making it difficult for pharmacy educators to justify the incorporation of antiracism into required curriculum as a means of addressing critical public health issues. Given that racism is a compilation of macro-level and micro-level factors, it would be prudent to embed antiracism curricula into pharmacy educational outcomes to ensure student pharmacists grasp how people of color experience racism.

The journey to being antiracist requires an in-depth understanding of the multiple levels and systemic effects of racism. While often challenged by the notion of being “not racist,” an antiracist rejects the seemingly neutral stance of being “colorblind” and supports policies and ideas that aggressively confront and reduce racial inequity. As explained by Kendi, “antiracist” is not a permanent identity, but is a continuous strive and “radical choice” that requires ongoing self-criticism, self-awareness, and self-examination. Therefore, antiracism teaching, coupled with existing competencies, will require reorientation and an approach to patient advocacy and...
teaching that addresses racism as a root cause of health disparities.

The *upstream* concept, often illustrated by an adapted parable by public health and health professionals,\(^{15}\) proposes a shift in addressing health disparities by identifying the root causes of concerns observed “downstream.”\(^{16}\) While understanding the importance of downstream interventions, an *upstreamist* is a practitioner who is dedicated to the thorough assessment and treatment of the social determinants of health and an advocate for social justice. For example, the mindset of an upstreamist may be geared towards targeted, macro-level interventions that address the disparities of COVID-19 testing sites and underlying conditions among people of color, while the current health care system works to increase the supply of antiviral therapies used during the course of COVID-19 treatment in hospitals that serve their respective neighborhoods. An American Heart Association presidential advisory published in 2020 referred to addressing and dismantling structural racism as a “push further upstream,” which is a task that requires societal effort.\(^ {17}\) Pharmacists, who have been recognized as one of the most accessible health care professionals in the United States,\(^ {18,19}\) must accept the task at hand by recognizing structural racism as a historical and current threat to health equity and challenge any system which upholds its effects.\(^ {17}\)

Throughout this review, antiracism teaching will be presented as a cogent approach to dismantling health disparities and fostering an upstreamist mindset in student pharmacists. Relevant theoretical frameworks will be presented, with a focus on integrating critical race theory into pharmacy educational outcomes (Center for the Advance ment of Pharmacy Education [CAPE]) and the assessment of practice readiness (Entrustable Professional Activities [EPAs]). Institutional and pedagogical strategies used within various health disciplines will be reviewed to suggest future pathways for pharmacy educators to deliver effective antiracism curricula.

**METHODS**

A literature search was conducted to examine methods for antiracism teaching adopted by various disciplines. PubMed, Ovid/MEDLINE, and EBSCOhost were searched to retrieve relevant articles using the following keywords: “antiracism” or derivatives of the term (eg, anti-racist, anti-racism), “education,” “teaching,” “pedagogy,” “academic,” and “curriculum.” Searches were completed in February 2021. Articles were included if published in the United States within the last 10 years. Articles published prior to 2011 were included if they discussed frameworks or defined concepts that were deemed relevant to current antiracism teaching as determined from an analysis by the authors. Articles published prior to 2011, those which did not include relevant key terms or topics, and those published outside of the United States were excluded from review. Subgroup analysis was then conducted to select articles that related to health science students; didactic, co-curricular, or experiential teaching in higher education; and models for mitigating racism within health care practice settings and/or research. Articles were reviewed, selected, and analyzed to support any perspectives put forth by the authors (Table 1).\(^ {20-29}\)

The authors worked collectively to provide future directions for antiracism teaching in pharmacy education based on their findings and experience/expertise.

**FINDINGS**

As with other curricular content, pedagogical approaches for antiracism should be integrative. In pharmacy education, this involves development of basic knowledge, skills, and abilities.\(^ {30}\) Though skills and abilities signify a learner’s or future practitioner’s capacity to combat racism within the health care system, knowledge provides the foundation for building such capacity. Theoretical frameworks combined with a basic understanding of related terminology (Table 2)\(^ {12-14,31-33}\) represent important methods for building knowledge. South and colleagues state that such frameworks specifically “enhance awareness of racism using ideas and words to deliberately interrupt the norms supporting structural and institutional racism.”\(^ {34}\) Though different in scope, each theory explains race and/or racism as a root cause for health disparities. Each should also be framed in a way that helps the learner

**Table 1. Institutional and Pedagogical Strategies Described in the Health Professions Literature**

| Curricular development\(^ {20-24}\) | Skills-based assessment\(^ {20}\) | Pre-professional course\(^ {25}\) | Co-Curricular, multi-day retreat\(^ {26}\) | Health equity rounds\(^ {27}\) | Interdisciplinary lectures\(^ {27}\) | Art-based small groups\(^ {23}\) | Mandatory health equity and social justice course\(^ {28}\) | Lecture and small group discussions\(^ {28}\) | Case discussions & flipped classroom\(^ {24}\) | Mandatory “Race and Medicine” workshop\(^ {29}\) | Race reading group\(^ {29}\) |
The social psychological perspective centralizes racism and other forms of discrimination (e.g., sexism, agism) as a root cause of health disparities. Theorists of this derived conflict theory further purport that the commodification of health care has led to crisis-level inequalities wherein the wealthy and privileged in society have significantly greater access to health coverage and optimal care. Consequently, marginalized groups, such as racial and ethnic minorities, are often shut out from access and bear the disproportionate burden of poor health. Groups that are more impacted by structural racism also lack social and economic power. An example is the patient-clinician relationship. Because of the power differential between the patient and clinician, clinicians may derive significantly more social (e.g., social status, peer recognition, career advancement) and economic (e.g., profits and/or income) benefit from patient encounters than the patients themselves. Also common is racial discordance between the patient and the clinician. Racial discordance can lead to poor patient care in cases where the race of either party is devalued, or clinical decision-making is attached to harmful biases. van Ryn and colleagues describe how health care providers or insurers may justify limiting the treatment they recommend for Black patients relative to White patients based upon the stereotype that Blacks are not sufficiently motivated or capable of taking care of their health. These decisions produce health disparities and further perpetuate stereotypical perceptions of a group.

With origins in legal studies and social justice, critical race theory has emerged as an important methodological tool for developing racial consciousness and challenging social structures that promote racial hierarchies in health care. Critical race theory, as described by Ford and Aihihenbuwa, provides a methodology for helping clinicians combat racism when carrying out research, scholarship, and practice.

This involves a transformative approach to health disparities in public health that encompasses four critical race theory features: race consciousness, contemporary orientation, centering in the margins, and praxis. Race consciousness improves recognition and understanding of racialized constructs and mechanisms. It also challenges the idea that “colorblindness” is a means of eliminating racial inequities. This also involves a more comprehensive understanding of the lived experience of marginalized racial groups by considering the cumulative effects of racism on health over the lifespan. Contemporary orientation enhances awareness about the varied ways in which racial minorities experience racism. Herein, internalized, institutional, and structural racism are more consequential to health than racism from individual interactions. This contemporary viewpoint provides justification for the third domain of critical race theory, centering in the margins, which argues that discourse on racism should shift from the perspective of the majority group to marginalized groups within a society. Praxis involves teaching the importance of and methods for community engagement and critical self-reflection to enrich research processes in marginalized populations. More importantly, it emphasizes community ownership of findings so data can be applied to their “ongoing efforts toward collective self-improvement.” Though critical race theory suggests focusing on the experiences of those most impacted by racism in order to improve both clinical practice and research, it acknowledges the lack of tools available to properly analyze the contribution of race and racism to poor health, a barrier caused, in part, by the presumption that scientific research is inherently objective. Though supportive literature does not currently exist within academic pharmacy, the public health discipline has created a pathway for all
Implementing Strategies to Consider in Pharmacy Education

In 2016, the Council on Education for Public Health published updated competencies, one of which centered around racism, structural bias, and social inequities. Prior to this update, the School of Public Health at the University of Washington developed a longitudinal curriculum to directly address the effects of racism. This update was devised after a two-day workshop on addressing individual and structural racism. Based on the work plan devised by faculty, staff, and students, action items were developed to steer incorporation of antiracism into courses, schoolwide messaging, community-based efforts, and accountability measures (eg, course evaluations and performance reviews). Courses that addressed the adopted competency focused on racism as a social determinant of health, internalized racism, and health equity. The faculty integrated skills-based assessments into the course to demonstrate the capacity of learners to work across diverse populations. Racism analysis skills were incorporated into several graduate-level courses, both didactic and experiential, and validated tools to assess racial literacy were used by instructors to determine student learning outcomes.

DallaPiazza and colleagues implemented a mandatory health equity and social justice course with a designated three-hour session on racism and health for first-year medical students. The course began with a lecture portion that provided racial history as it related to the location of the institution. Small-group case discussions were utilized after the lecture to further explore and emphasize material. Ten to twelve students reviewed five different focus areas with guidance from a peer facilitator, rather than a faculty member, to enhance student comfort levels. At course conclusion, participants were assessed using multiple-choice and short-answer questions. Findings revealed that students felt their knowledge and skills had increased, though they would have preferred spending more time learning how to define race and racism.

Davis and colleagues discussed the implementation of a multi-day educational co-curricular activity offered through the Office of Student Life at the University of Northern Colorado. The activity, “Catalyst for Growth,” involved discussions among students and faculty members of nursing, biological sciences, and psychology. Conversations addressed eight constructs of identity: race, gender, sexual orientation, age, religion or spirituality, national origin, ability, and social economic status. Participants took a confirmable, qualitative pre and post assessment of their knowledge on the subject matter. While experiencing increased comfort with discussing class, ability, national origin, race and ethnicity, students noted having decreased levels of comfort when conversations regarding sexual orientation, gender identity and religion/spirituality surfaced. Although faculty participants reported personal growth, the researchers determined that there was a need for increased and ongoing education and interdisciplinary work, particularly regarding social identities.

Perdomo and colleagues developed health equity rounds as a longitudinal activity for local residency programs, as well as the pediatric department of a teaching medical center. These one-hour conferences consisted of case presentations centered around incidents of implicit bias and structural racism. Interdisciplinary groups of faculty and students reviewed subject matter history, avenues for advocacy, and completed reflection exercises. Cases were selected from scenarios in which racism had been identified as a factor in patient care. Over the span of two years, the format of the conferences evolved to include small group debriefs and coverage of a broad range of topics. However, the process of evaluating this program was noted as an ongoing challenge.

While the impact of socioeconomic status and other upstream factors on health have been documented, the systemic effects of racism across the lifespan of marginalized persons must be emphasized to address the ethnic and racial inequities in health care. Cultural competency and cultural humility models have been extensively explored, implemented, and assessed in pharmacy curricula. Underpinnings of cultural competency have found their place in the Pharmacists’ Patient Care Process, which calls for the inclusion of cultural factors during patient assessment. While culturally responsive teaching should remain an important benchmark for pharmacy training programs, student pharmacists must fully comprehend racism as a barrier to achieving optimal health outcomes among minority populations. This involves the incorporation of critical race theory into pedagogical practice, and a move beyond cultural competency and cultural humility training, which can inadvertently perpetuate ethnocentrism, stereotyping, and cultural (mis)attribution bias, or result in oversimplification of diversity. Furthermore, the significance of racism in society and health care could be unintentionally curtailed by the “multicultural umbrella,” leading to the perpetuation of “colorblindness” and the perception of a race-neutral health care system.
By integrating critical race theory into pharmacy education, the upstream approach to health disparities is adopted by intentionally centralizing issues of racism as a root cause of health inequities. The utilization of select critical race theory principles defined by Ford and Airhihenbuwa can help build upon our existing efforts and enrich the approach to educational outcomes by pharmacy programs (Table 3).42,52

Building “race consciousness” (CAPE Domains 1, 3 & 4; EPA Domains 1-6)52 within student pharmacists complements various educational outcomes. Self-awareness and professionalism require the ongoing process of examining personal beliefs and biases that may hinder patient-centered care and the trust conferred as health care professionals.53 While this process includes intentionally seeking encounters with racially, ethnically, and culturally diverse patients, race consciousness enhances one’s self-awareness by encouraging acknowledgment of how racism shapes such beliefs. By perceiving the privileges and disadvantages allocated by race, student pharmacists can begin to understand how racialization undergirds health inequities. Personal acknowledgment of structural racism, however, could be hindered by lack of readiness, adopting a “colorblind” position, or deeming such discourse itself as “racist.”42,51 Acknowledging race as a social construct and how positions in social hierarchy determine privilege, power, and both health access and outcomes is key to establishing an upstream antiracist approach to achieving aspects of CAPE Domains 1, 3, and 4. This can be initiated by designing objectives, longitudinal assignments, and self-reflection activities specific to structural racism and privilege in courses with professionalism and cultural awareness components.

“Practice-ready” student pharmacists are trained to provide patient-centered care, acknowledge the influence of population-based health, and design strategies and interventions for chronic disease management and wellness.53 Learners should be guided to critically process how structural factors affect marginalized populations. Contemporary orientation (CAPE Domain 2; EPA Domains 1 & 3)42,52 challenges the narrative that incidents of racism are rare, blatant occurrences, and requires one to seek a greater understanding of modernized racialization within health care practices. Educational strategies should include challenging social hierarchies and emphasizing the subtle nature and consequences of structural racism. Learners will then begin to understand how certain upstream decisions made by those in power continue to sustain inequities by placing marginalized groups at a disadvantage. Because CAPE Domain 2 seeks concrete preparation of student pharmacists to be practice ready, this critical race theory principle may be achieved by approaching the Pharmacists’ Patient Care Process from an “anti-racist” position54 and incorporating issues of race in assessed entrustable professional activities (EPAs) during didactic, co-curricular, and experiential activities.

“Centering in the margins” and “praxis” (CAPE Standards 3; EPA Domains 1-2, 4-5)42,52 requires a shift in discourse to the perspective of marginalized populations to inform practice.43 For example, the discussion and concerns of low COVID-19 vaccinations among African Americans is often centered around the historical distrust stemming from the Tuskegee Experiment and other egregious unethical events in the medical and political history of the United States.55 Mainstream attempts to address this concern through patient assurance that the health care system is mandated to “do no harm,” but the manifestations often contradict the lived experiences of many African Americans. By embracing the voice of marginalized patients, student pharmacists are equipped to tackle present-day racism, advocate for social justice and health equity, and explore new solutions for current issues. Pedagogical strategies should focus on intersectionality between race, gender, and other socioeconomic factors; embracing and advocating for a diverse health care workforce; and patient-centered thinking in order to integrate this critical race theory principle with CAPE Domains 1 and 3.

Future Directions

One central outcome for antiracism teaching is for student pharmacists to demonstrate agility in navigating the perspectives of diverse patient populations and exploring the impact of cultural values on patient care outcomes.53 Using a self-assessment tool that determines one’s perceived level of cultural competence, Echeverri and Dise developed profiles for medicine and pharmacy students for the purposes of an integrated pilot curriculum.6 Scores on items related to understanding the impact of prejudices on health disparities were the highest among African American pharmacy students. When given the opportunity to provide feedback on the curriculum, some students expressed interest in additional training. Others, however, believed racism was no longer relevant because they were of the “new multicultural and global generation” or felt their time could be best spent on “more important” courses.

While social determinants of health are lauded as a mainstay in addressing health inequities, they should be taught as “conditions to be challenged and changed” rather than “facts to be known.”57 Although racism is considered a determinant of health,58 discourse and education on racism in health care tend to be brief, if not sidelined.59
Therefore, antiracism curricula can be utilized as a means to uproot the perspective of biological inferiority of marginalized groups and contextualize health disparities through the lens of structural racism. Antiracism teaching should be a stepwise, longitudinal process that is implemented early in the didactic curriculum, includes cocurricular and interprofessional activities, and applied during required advanced practice experiences. Pharmacy programs should also explore innovative strategies to successfully integrate antiracism principles in objective structured clinical examinations (OSCEs) and flipped classrooms, which builds on strategies outlined in Table 3. The development of pharmacy-specific evaluation modalities is also necessary to best assess antiracism teaching throughout the curriculum. While faculty and administration can face resistance and significant barriers to adopting antiracism teaching in their programs, strategies used by Hagopian and colleagues can serve as a framework for the holistic development and infusion of antiracism curricula.

In consideration of the aforementioned, preprofessional requirements may also be explored to ensure baseline exposure to antiracism principles prior to entering the Doctor of Pharmacy program. Metzl and colleagues describe the development of a pre-health major at Vanderbilt University that emphasized interprofessional learning of health and illness. Students engaged in discourse about racial and ethnic disparities as well as critical perspectives about the politics of health. Faculty-student colloquia and structural immersion assignments were used to assess the structural competency of learners. Upon graduation, students who progressed through the program were
Table 3. Mapping Public Health Critical Race Framework Tenets\textsuperscript{42} to Pharmacy Educational Outcomes\textsuperscript{52}

| Critical Race Theory                  | CAPE Domain & Subdomains                                                                 | EPA Domains & Statements                      |
|---------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------|
| Centering in the margins              | Dale 1: Foundational Knowledge                                                          | Domain 1: Patient Care Provider               |
| Praxis                                | 1.1 Learner - Foundational sciences - Patient-centered care - Population-based care      |                                               |
| Contemporary orientation              | Domain 2: Essentials for Practice & Care                                                 | Domain 1: Patient Care Provider               |
|                                       | 2.1 Caregiver - Patient-centered care - Health and wellness - Provider - Population-based & patient-centered care | Domain 3: Population Health Promoter          |
| Centering in the margins              | Domain 3: Approach to Practice & Care                                                    | Domain 1: Patient Care Provider               |
| Praxis                                | 3.1 Problem-solver - Viable solutions - Patient advocacy - Patient empowerment - Collaborator - Interprofessional care - Includer - Cultural sensitivity - SDOH - Communicator - Communication, rapport, empathy | Domain 2: Interprofessional Team Member      |
| Race consciousness                    | Domain 1: Foundational Knowledge                                                         | Domain 1: Patient Care Provider               |
|                                       | 1.1 Learner - Foundational sciences - Patient-centered care - Population-based care      | Domain 2: Interprofessional Team Member      |
|                                       | Domain 3: Approach to Practice & Care                                                    | Domain 3: Population Health Promoter          |
|                                       | 3.2 Educator - Impart information                                                        | Domain 4: Information Master                  |
|                                       | Domain 4: Personal & Professional Development                                             | Domain 5: Practice Manager                   |
|                                       | 4.1 Self-awareness - Personal and professional growth - Leader - Creating and achieving goals - Professional - Building and upholding trust | Domain 6: Self-developer                     |

Adapted from Pittenger AL, Copeland DA, Lacroix MM, et al. Report of the 2016-17 Academic Affairs Standing Committee: entrustable professional activities implementation roadmap. *Am J Pharm Educ*. 2017;81(5):S4. https://pubmed.ncbi.nlm.nih.gov/28720927 doi: 10.5688/ajpe815S4.
more prepared to recognize the correlation between health outcomes and structural factors. To successfully guide learners through antiracism curricula, pharmacy programs must incorporate required trainings and professional development opportunities for faculty. Facilitating and managing such conversations throughout pharmacy curricula must begin with a level of awareness and personal commitment of faculty, while recognizing that such activities may be difficult. However, ongoing commitment to the delivery of antiracism curricula encompasses professional and personal benefits. As demonstrated by student feedback presented by Echeverri and Wise, faculty must be prepared to address the perspectives of all students and where points of view may diverge. It is also important to assist students with connecting their own experiences with those of the

Table 4. Student Perspective on Antiracism Teaching in Pharmacy

| My Perspective |
|----------------|
| America was battling two pandemics in 2020, Covid-19 and police racism, both of which forced the nation to take off the bandage that covered the deep wound of injustices that have plagued our country for centuries. I witnessed firsthand as COVID-19 disproportionately impacted minority communities due to pre-existing health conditions brought on by systemic racism and inequality of healthcare access. I watched Dr. Susan Moore’s Facebook video of medical racism, which clearly depicted medical racism. She relentlessly asking for medication and proper treatment from physicians who did not seem to take her complications seriously. As a fourth-year pharmacy student who will soon enter the workforce, I believe it is imperative for healthcare professionals to have a level of compassion, respect and understanding for all races and cultures. Pharmacists are gatekeepers to the greater healthcare system, as we are often the first point of contact to address patient questions and concerns. With the vaccination rollout underway, pharmacists are best positioned to not only distribute the vaccines but also address issues such as vaccine hesitancy, especially in marginalized or historically disaffected communities. Addressing structural racism in pharmacy curricula focused is an important first step. |

| Recommendations for the Future |
|-------------------------------|
| Longitudinal education on racism and inequality can be addressed through open discussions with diverse peers and communities, workshops, community projects, and diversity among leadership and students. Furthermore, self-reflection is required to unravel learned biases and identify the internal work required to truly provide patient-centered care. The hard work starts from within, and it cannot be accomplished until every level of healthcare adopts an antiracism approach. History cannot be rewritten, but commitment and ownership can forward the change that this country so desperately needs. |

*Chanae Brown, Fourth-year Doctor of Pharmacy student, Howard University College of Pharmacy
patients they will serve through exercises that develop empathy (Table 4).

Faculty must encourage and create a “safe space” for antiracist discourse that involves open communication and input from all participants. However, this designated “space” requires a level of accountability, mindfulness, and independent learning of all participants to ensure minority students and faculty are not viewed as sole providers of information or representatives of their race or ethnic groups. Additionally, these spaces must recognize and validate feelings, control the process of the conversation rather than the content, and prevent discrimination and harassment. Furthermore, didactic and experiential training settings must empower student pharmacists to serve as champions for racial solidarity without fear of being “difficult” or racially paranoid.

**SUMMARY**

**Developing the Upstreamist**

Despite the continuous growth of racially and ethnically diverse populations within the United States, health disparities persist and often occur in the context of both historical and contemporary inequality and discrimination. While the Institute of Medicine considers such disparities “unacceptable” and has proposed recommendations in their landmark report, recent studies suggest that health care workers remain underprepared to confront health disparities and racism. The COVID-19 pandemic has placed a microscope directly at the intersection of the various components of racism and specifically revealed the impact of discrimination within the health care system. The rate of hospitalizations and mortality due to COVID-19 among African Americans and Hispanics is remarkably higher in proportion to the overall population. In the continued exploration of the upstream approach of antiracism teaching in pharmacy education, all programs must deliberately critique where they are in this effort, the potential challenges based on institutional infrastructure, and how to effectively implement antiracism teaching (Figure 1). The oath of the pharmacist includes improving the well-being for all. In the name of remaining true to pharmacists’ role as patient advocates, following the lead of colleagues in public health, medicine, nursing, and social work will be essential in ensuring student pharmacists are equipped to become antiracist practitioners. Racial disparities in health care are even present when insurance status and disease severity are comparable. By intentionally addressing racism in the context of health disparities, pharmacy students can begin to envision what it means to be an upstreamist who is committed to health equity (Table 4).

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