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UNSOLICITED NARRATIVE REVIEW

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What is intersectionality and why is it important in oral health research?

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Abstract

This paper is the second of two reviews that seek to stimulate debate on new and neglected avenues in oral health research. The first commissioned narrative review, "*Inclusion oral health: Advancing a theoretical framework for policy, research and practice*", published in February 2020, explored social exclusion, othering and intersectionality. In it, we argued that people who experience social exclusion face a "triple threat": they are separated from mainstream society, stigmatized by the dental profession, and severed from wider health and social care systems because of the disconnection between oral health and general health. We proposed a definition of *inclusion oral health* and a theoretical framework to advance the policy, research and practice agenda. This second review delves further into the concept of intersectionality, arguing that individuals who are socially excluded experience multiple forms of discrimination, stigma and disadvantage that reflect intersecting social identities. We first provide a theoretical and historical overview of intersectionality, rooted in Black feminist ideologies in the United States. Our working definition of intersectionality, requiring the simultaneous appreciation of multiple social identities, an examination of power and inequality, and a recognition of changing social contexts, then sets the scene for examining existing applications of intersectionality in oral health research. A critique of the sparse application of intersectionality in oral health research highlights missed opportunities and shortcomings related to paradigmatic and epistemological differences, a lack of robust theoretically engaged quantitative and mixed methods research, and a failure to sufficiently consider power from an intersectionality perspective. The final section proposes a framework to guide future oral health research that embraces an intersectionality agenda consisting of descriptive research to deepen our understanding of intersectionality, and transformative research to tackle social injustice and inequities through participatory research and co-production.

KEYWORDS

inclusion oral health, inequalities, intersectionality, social identity

1 | INTRODUCTION

The distribution of life chance opportunities is affected by an individual's race and ethnicity, gender, socio-economic status, sexuality, nationality and citizenship status, and (dis)ability status.[1,2] These elements of social identity are consistently associated with multiple determinants of health, including oral health outcomes and access to dental services.[3,4] Despite significant progress in identifying which social identities influence the oral health of individuals and populations, oral health research has largely overlooked the interrelationship among these social identities and how these interrelationships produce health outcomes. The tendency has been to examine "variables" such as race and ethnicity, gender, sexuality and class in isolation.[5,6] Rather than viewing each of these social categories as separate entities, Hulko[7] contends that it is the "entanglement of identities that makes up an individual". Social identities operate and intersect in individuals' lives in complex ways in everyday social contexts. Intersectionality provides a theoretical framework that encapsulates this complex reality.[8] While public health[9] and global health scholars[10] have recognized the epistemological tenets and application of intersectionality theory, the oral health research community at large has yet to embrace intersectionality, despite its potential to promote a deeper understanding of how oral health inequalities are manifested and maintained.

The aims of this paper are the following: (a) to provide an overview of intersectionality; (b) to outline approaches that have been taken to date to explore intersectionality in oral health; (c) to discuss how oral health could benefit from more fulsomely adopting intersectionality theories and methodologies; and (d) to propose a framework to guide the intersectionality oral health research agenda.

2 | WHAT IS INTERSECTIONALITY?

Crenshaw[11] first coined the term intersectionality in 1991; however, the roots of intersectionality can be traced back to Black feminism in the United States, heralded by the Sojourner Truth's *"Ain't I a Woman?"* speech in 1851.[12] Truth used her own identity as a Black woman to deconstruct the notion that race, ethnicity and gender were mutually exclusive. Intersectionality then became a prominent theme in Black feminist movements in the 1960s and 1970s, emphasizing the interconnectedness of gender, race and ethnicity, class, and sexuality.[13] The roots of intersectionality were also evidenced by the Black feminist organization, the Combahee River Collective, in their 1982 statement.[14] This statement argued that because sexism, racism, classism, and homophobia were interlocking systems of oppressions, solutions seeking to dismantle any of these structures had to be interwoven.[6]

Theories on intersectionality posit that a person's identity is a confluence of multiple social elements simultaneously affecting and affected by one another.[15] Some elements are associated with privilege and hierarchy while others are disadvantageous; these elements intertwine to shape life chance opportunities.[11] For example, women of colour endure interlocking forms of oppression associated with simultaneous membership in minority gender and race and ethnic groups. Additionally, some women of colour may experience concurrent heterosexual privilege and/or class privilege, while others are further disadvantaged because of sexual minority status and/or low socio-economic status. These multiple intersecting social identities operating at the micro-level further interlock with macro-level structural factors (ie poverty, white supremacy, patriarchy). The union of these multi-level intersections produce health inequalities.

Intersectionality is a theoretical framework which maintains that elements such as race and ethnicity, gender, socio-economic status, and sexuality map onto strata within social hierarchies where they interact and intertwine, resulting in unique identities within, and outcomes for, individuals.[16] Intersectionality includes an explicit awareness and recognition of power, oppression, inequality, and social exclusion.[17,18] The meaning and significance of these social elements vary across time and space, depending on their social contexts, cultures, and historical periods.

Viewed from this intersectionality framework, it is clear that social identity is complex.[19] As a result, we should counsel researchers away from simplified models that consider components of identity as separate entities and that prioritize one component over another. In contrast, an intersectionality framework validates complexity, requiring an in-depth understanding of the experiences, meaning, and consequences of individuals who simultaneously belong to multiple intertwined social identities embedded in social contexts of power, discrimination, and social exclusion.[7,20] Adopting an intersectionality approach means acknowledging the complexity of the human experience and accepting that oral health often presents "wicked" and complex problems that require deep enquiry.[21,22]

Intersectionality adopts a nonadditive, nonmultiplicative approach.[2] Whereas an additive approach would consider the joint effect of being an ethnic minority woman who lives in poverty as being cumulative (the sum of three marginalized statuses),[23] a multiplicative approach would attempt to identify which social identity dominates and provides the greatest explanation for inequalities.[21] Intersectionality instead focuses on examining *whether and how* social positions and forces interact to influence the human experience.

Else-Quest and Hyde[2] proposed a working definition of intersectionality research with three essential elements: Intersectionality research should simultaneously (a) consider the experiences and realities of individuals belonging to multiple social identities, while (b) including critical examination of power and inequality, and (c) incorporating individual and social contexts as fluid and dynamic. Further, Dill and Kohlman[24] made a distinction between "weak" and "strong" approaches in intersectionality research, viewing them on a continuum. "Weak" approaches incorporate multiple social identities categorized in an ad hoc, atheoretical and opportunistic manner using available data.[25] In contrast, "strong" intersectionality is both theoretical and methodological from the outset, seeking to generate meaningful discussion about how power dynamics produce unique human experiences and outcomes.[26] Adding to the far end of this continuum, researchers have included "transformative"

intersectionality, which moves research beyond "strong" intersectionality to include an explicit call to action to address social injustice and disempowerment, thereby reflecting the feminist origins of intersectionality.[27,28]

3 | WHAT DO WE KNOW ABOUT THE APPLICATION OF INTERSECTIONALITY IN ORAL HEALTH RESEARCH?

Public health research has engaged with intersectionality, reflected by the increase in published research papers over the past decade.[10,29-32] Bowleg's[8] 2011 PubMed search for the term "intersectionality" produced 49 results, whereas when the authors of this manuscript replicated the same search on the 5th February 2020, 786 results were retrieved. However, a search using the keyword "intersectionality" in 11 peer-reviewed high-impact dental journals produced only one relevant article.[8] Thereafter, a PubMed search using "intersectionality and oral health" and "intersectionality and dentistry" as keywords on the 30th January 2020 produced only six articles. These six articles included a critical review of income and oral health, which called for an intersectionality approach in its conclusion.[33] A further two papers mentioned intersectionality only in the discussion sections.[34,35] Wright presented a conference paper on intersectionality, oral health and tobacco use focusing on Black people in the United States.[36] Freeman[37] and our own commissioned narrative review [17] considered intersectionality in the context of social inclusion, othering and stigmatization.

One of the challenges of identifying existing intersectionality and oral health research has been that intersectionality is often hidden in social science, education or geography journals, where intersectionality concepts are latent, buried within the narrative and therefore easily overlooked by oral health researchers.[38,39] An example of this is in Moran's paper on female prisoners which alludes to the intersection of social class and gender in female ex-offenders.[39] Women described the stigma, shame and self-consciousness of having missing teeth, seen as a marker and a visible sign of their incarceration.[39] The loss of teeth was linked to their feelings of disempowerment when entering the job market after their release, intertwined with feminine concepts of beauty.

Engagement with some of the ideas embedded in intersectionality theory can also be found in more conventional oral health research under the banner of inequality research. Numerous studies have examined connections among social identities and oral health inequalities, showing that the most disadvantaged members of society disproportionately bear the burden of oral ill-health and report negative oral health outcomes.[40] However, marginalized groups are continually theorized as homogenized collectives. Several researchers have unmasked important intersections in their research; however, these often remain latent because of this homogenization. For example, a study by Schwartz et al[6] on oral health inequalities associated with sexual orientation (divided as Gay/Lesbian, Bisexual, exclusively Heterosexual and "Homosexually experienced") misses an opportunity to understand the complexity of how sexual orientation intersects with gender, race and ethnicity, income, and education to produce oral health problems. Similarly, while Delgado-Angulo et al[34] used intersectionality theory to explore the association between ethnicity and immigration status and caries, in using adjusted regression models to identity independent effects and dominant identities, they applied a multiplicative approach.[41] In so doing, they ignore gender and miss the opportunity to understand how inequalities are experienced by different intersections (eg being a male, White, newly arrived immigrant in the UK subjected to discrimination). Finally, Sabbah et al[42] analysed data from the 2014 U.S. Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS) to test associations between racial discrimination and use of dental services. This study used hierarchical logistic models to disentangle and exclude what were theorized as "confounders": gender, race and ethnicity. This is another missed opportunity to deepen our understanding of how these elements as important components of social identity both shape the human experience and also contribute to discrimination inhibiting the use of dental services.[43]

There are several possible reasons why oral health research has not yet embraced "strong" or "transformative" intersectionality approaches. The dominance of deductive quantitative research methods and the adoption of epistemologies that favour post-positivist paradigms have led to research questions in oral health that repeatedly seek to only identify and observe social gradients.[44,45] Intersectionality theory cannot be applied to such data *post hoc* because most quantitative oral health surveys sample insufficient numbers of participants from marginalized groups to allow comparisons and do not simultaneously collect information about different social identities to enable detailed explorations of intersections.[46] Without robust data, intersectionality analysis has to rely on atheoretical opportunistic data dredging of survey data, big data or routinely collected secondary data, and can produce only spurious associations.[47]

Many intersectionality researchers rigidly contend that intersectionality falls under the social constructionist paradigm, better suited to qualitative and mixed methods research.[16,48] These methodologies have the potential to generate "information rich", contextual and more nuanced data that could inform transformative actions and policies.[2,49] Hill Collins[50] also argued that the epistemology supporting intersectionality (grounded on ascribing meaning from lived experiences) values personal expression and uniqueness, embedding empathy to validate knowledge through methodologies such as participant observation, critical ethnography, life histories and participatory action research. These approaches are particularly relevant to dentistry as a caring profession, yet few studies have used these research designs in oral health inequality research.

Strong intersectionality research requires an explicit consideration of power dynamics and power structures that could lead to discrimination. Bowleg and Bauer's encapsulated this notion in their statement "no attention to power, no intersectionality".[51] Although excellent research by Horton and Barker[52] on

Mexican immigrants in the United States and by Durey et al[53] with Aboriginal Australians explores racism and power in relation to oral health, we are suggesting an even more explicit intersectionality approach that would seek to theorize multiple forms of discrimination, power structures, and relationships. Co-production is one approach to transformative intersectionality that seeks to redress power imbalances by involving service users in all stages of developing a service or an intervention.[54] Co-production as "a relocation of power and control"[55] enables service users to define their own problems, and decide how best to address these problems based on their knowledge and lived experience.[56] There are several examples of co-production to draw on in intersectionality from researchers who work with Indigenous communities in Australia[57] and Canada. [58] They have used qualitative research to engage local communities who control the research data and decide how the research is published under power-sharing agreements.[59] Jamieson et al[60] working with indigenous communities in South Australia revealed colonial legacies, paternalism and feelings about being disempowered about their oral health and health care decisions. Their stories informed the development of culturally sensitive oral health promotion involving members of the community as actors in an audio-visual tool.[57] Co-production has challenges, however, which could be the reason why there are few examples of co-produced interventions addressing oral health inequalities.[37,61,62] Barriers include dominant expert-based research processes,[54] differing priorities,[63] and a lack of knowledge and understanding about what co-production means.[64,65]

4 | HOW COULD ORAL HEALTH RESEARCH BENEFIT FROM ADOPTING AN INTERSECTIONALITY FRAMEWORK?

Other health disciplines have advanced intersectionality research, including medicine,[66] nursing,[67] psychology,[68] and psychiatry and mental health.[69,70] This work provides important learning opportunities for oral health research. Intersectionality challenges oral health researchers to adopt an inclusive approach to engage meaningfully with people who are typically marginalized and excluded from oral health research. Adopting an intersectionality framework in oral health research could deepen our understanding of inequalities based not on single factors but on collective identities.[71] Intersectionality poses research questions that seek to understand the complex experiences of people, reflecting their lived realities, thereby overcoming the limitations of the current simplistic single-variable oral health inequality research.[72,73] Intersectionality research instead aims to unpack how an individual's oral health is simultaneously impacted by multiple social elements, and in particular, can theorize how certain intersections predispose people to greater risk of poor oral health or indeed offer protective factors. Adopting an intersectional framework enables us to identify populations who are more likely to be a target of stigma, experience exclusion from dental services, likely to self-stigmatize and disengage from services.[74] Intersectionality adds and offers a new dimension to consider how we view and work with people suffering multiple forms of discrimination.

5 | HOW CAN ORAL HEALTH RESEARCH EMBRACE AN INTERSECTIONALITY FRAMEWORK?

Having presented a case advocating for the explication of intersectionality in oral health research, how can we advance the "strong" and "transformative" intersectionality oral health research agenda? Hankivsky et al[20,75] developed an intersectionality policy framework using iterative participatory research methods that provides an empirical model we believe is amendable to oral health research. This framework creates a "scaffold" to build oral health research that incorporates descriptive and transformative research components. Descriptive research would focus on revealing and reflecting upon "what", "why" and "how" questions to uncover how intersecting identities affect oral health outcomes, inequalities and service utilization using theoretically driven approaches. The intersectionality oral health research process would start with identifying relevant research questions by involving and engaging participants and stakeholders; these questions would be built collectively to identify relevant social identities and consider what data to collect to enable sufficiently detailed intersectional analyses. Research designs that address the research questions should be flexible, allowing co-creation and co-interpretation of knowledge using multimethod and mixed methods approaches. Oral health researchers may not presently have these applied research skills and may need further training to overcome these knowledge and skills deficit.[76,77] Research by Wilder et al[78] is one example of descriptive intersectionality research in their exploration of the intersection of race, class and marital status and its impact on mothers caring for children who had attention-deficit hyperactivity disorder (ADHD). Their discourse analysis used interviews and self-report narratives of critical events to capture mothers' lived experiences. They revealed both shared and divergent discourses about "good" mothering. Shared discourses of sacrificial practices and consistently defending and normalizing their children's behaviour ran alongside divergent discourses. These divergent discourses were related to differences in mothering capital: the resources that were available to mothers based on the different intersections of race, class and single-parent status.

Intersectionality oral health research has the potential to be transformative through the engagement of social justice.[68] Transformative research would aim to find real solutions to the issues identified through the descriptive research processes outlined above. For example, transformative research could mean working with marginalized populations to address issues that matter to them, such as stigma, discrimination, and dentist-patient power dynamics that challenge service access.[79-81] Transformative policies and services developed using co-production and participatory research methodologies would be tailored and targeted to reflect intersecting social identities. However, addressing the

lacuna of power dynamics through co-production will be challenging and will need to draw on the expertise from diverse fields including social scientists, policy analysts and critically engaged theorists such as feminist scholars. The co-authors of this paper come from diverse research backgrounds to reinforce the call for multidisciplinary research collaborations to meet the methodological challenges of this urgent new frontier in oral health inequality research. Having multidisciplinary authorship in dental publications and explicitly including intersectionality in the keywords of publications will help to collate the body of evidence exploring intersectionality in oral health research.

6 | CONCLUSION

This review has been designed to stimulate thinking and debate about intersectionality and its application in oral health research. While there has been some rudimentary recognition, we believe that oral health research has yet to fully embrace and appreciate how intersectionality could advance the oral health agenda. Intersectionality needs to be more explicit in oral health research publications, acknowledging it as an important and growing area of research. We suggest that this missed opportunity to embrace intersectionality in oral health may be the result of paradigmatic and epistemological differences, the dearth of researchers using "strong" intersectionality approaches, the lack of robust theoretically driven quantitative research, and under-theorized considerations of how power impacts lived experience. Our proposed framework provides a starting point to guide descriptive and transformative research that will expand and transform the way we understand oral health inequalities and tackle discrimination and social injustice using participatory research and co-produced services and policies.

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AUTHOR CONTRIBUTION

All authors were involved with the conceptualization of the paper, drafting and critically reviewing the manuscripts. All authors contributed and approved the final manuscript.

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