

Effectiveness of Human Pancreas Hypothermic Oxygenated Machine Perfusion for Islet Isolation in Clinical Settings: A Prospective Investigation

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Abstract

Introduction: In light of the growing focus on medicine's representation, we wanted to find out how gastroenterology (GI) and hepatology professionals in the United States perceive the current state of racial and ethnic workforce diversity and health care disparities.

Methods: A 33-item electronic cross-sectional survey was developed and distributed to members of five national GI and hepatology societies. The survey's topics were broken down into thematic modules, and respondents were asked to share their thoughts on racial and ethnic diversity in the workforce, health care disparities in GI and hepatology, and possible strategies to increase diversity in the workforce and increase health equity.

Results: Of the 1219 people who took the survey, 62.3% were men, 48.7% were non-Hispanic White, and 19.9% were from underrepresented medical backgrounds. Insufficient representation of underrepresented racial and ethnic minority groups in the education and training pipeline ($n = 431$; 35.4%), in professional leadership ($n = 340$; 27.9%), and among practicing GI and hepatology professionals ($n = 324$; 26.6%) were the most frequently reported barriers to increasing racial and ethnic diversity in GI and hepatology. There were 545 [44.7%] opportunities for career mentorship, 520 [42.7%] opportunities for medical students, and 473 [38.8%] leadership roles in programs and professional societies for underrepresented racial and ethnic minority groups as suggested interventions.

Conclusion: The perspectives that professionals in gastrointestinal and hepatology hold regarding health equity and racial and ethnic representation were examined in our survey. The findings ought to serve as a springboard for professional societies, academic institutions, and other organizations aiming to increase diversity, equity, and inclusion in our field. They should also inform future interventions to address workforce diversity and establish priorities toward improving health equity.

Keywords: Minorities • Disparities • Workforce • Representation

Introduction

The widespread nature of social and racial inequality has been brought to our nation's attention numerous times. Multiple responses have resulted from this injustice and nationwide acts of prejudice, including the Black Lives Matter movement's resurgence in 2020 and sometimes uncomfortable conversations about race and racism in the United States. In this context, racial and ethnic representation in the biomedical sciences, such as gastroenterology (GI) and hepatology, has also been reevaluated. Despite some progress over the past few decades to increase gender representation in GI and hepatology, traditionally underrepresented racial and ethnic groups have made less advancement [1].

The Relationship of American Clinical Schools characterizes underrepresented in medication (UIM) as "those racial and ethnic populaces that are underrepresented in the clinical calling comparative with their numbers in everybody." These gatherings have generally included Latino, Pacific Islander, and central area Puerto Rican individuals. A few examinations have exhibited the advantages of a different doctor labor force and working environment, including expanded

patient fulfillment, illness explicit information, and adherence to clinical recommendations. When suppliers and patients have racial, ethnic, or potentially phonetic concordance. UIM people bring underrecognized points of view to the work environment and to insightful exercises, and are bound to participate in wellbeing value research, work in underserved networks and in regions where admittance to mind is poor, and tutor understudies and learners who are likewise from UIM backgrounds [2].

Literature Review

There is a crucial need to increment work environment variety, consideration, and value in medication. The American Association for the Study of Liver Diseases will establish the Intersociety Group on Diversity (IGD) in 2020; American Gastroenterological Association; Association of American Gastroenterologists; American Culture for Gastrointestinal Endoscopy; and one manifestation of this movement is the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. A group of researchers from the University of California–Los Angeles (UCLA) developed a 33-question cross-sectional survey for GI and hepatology professionals, with the overall goal of determining perspectives of current racial, ethnic, and gender diversity within GI and Hepatology [3].

The goals of this intersociety collaboration are to eradicate health disparities in the patients served by members of these five national societies and to increase diversity, equity, and inclusion in the membership to find out what people think about the interventions that are needed to increase the field's racial, ethnic, and gender diversity; and to gather information about the experiences of UIM people and women working in our field. The demographic and professional characteristics of survey participants, as well as their perspectives on racial and ethnic diversity, health care disparities in GI and hepatology, are compiled in this article. Our ultimate objective was to inform future discussions, initiatives, and interventions that increase patient and provider satisfaction and health outcomes by increasing representation in the gastrointestinal and hepatology workforce [4].

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Discussion

Despite relatively stable UIM representation in GI and hepatology over the past decade, there is a lack of data on perceptions of diversity and disparities in the workforce. Given the significance and developing consciousness of variety, or scarcity in that department, we directed a public cross-sectional overview based study to look at current perspectives on labor force variety and wellbeing value, evaluate expected mediations to address variety and wellbeing disparities, and increment information on the encounters of those underrepresented in GI and hepatology. Our survey is the first to look at recent views on UIM representation and health equity among professionals in GI and hepatology. It reveals that one necessary first step may be to better demonstrate why these factors must be a critical priority in order to improve workforce diversity and address health disparities in our field [5].

Although this trend among GI and hepatology fellows is not reassuring, it correlates closely with UIM representation among internal medicine residents, according to data published by the Accreditation Council for Graduate Medical Education. Since 2011, the percentage of fellows in GI and hepatology who are UIM has remained low at 9.0%. Within academic GI and hepatology divisions, similar patterns are observed—only 9% of US academic gastroenterologists identify as UIM and there has been little change in the proportion of UIM individuals within GI and hepatology divisions over the last decade.¹² Potential contributors to these observations may be lack of racial and ethnic diversity in the medical training pipeline, non-diverse leadership, bias, racial discrimination, and the notion that UIM physicians may be less likely to promote themselves or majority of participants (59.7%) believed that racial and ethnic diversity had increased over the past five years, despite data indicating the opposite. When asked about their current level of satisfaction with workplace diversity, nearly three-quarters of participants stated that they were either somewhat or very satisfied [6].

Notably, there was a discrepancy between the large number of participants who stated that interventions are required to improve diversity and equity and the large number who were satisfied with the level of diversity in their workplace. Despite the fact that these results appear to be at odds, they are not incompatible. It's possible that the participants were pleased with the diversity but believed it could be improved further. 10.4% of those who said they were very satisfied (34.8%) said that diversity and equity need to be improved through interventions. 42.6% of those who said they were somewhat or very satisfied (73.0%) said that there are needs for interventions to improve diversity and equity. The finding may likewise mirror the huge extent of study members in administrative roles who were non-UIM (60.4%) and appraised fulfillment high (77.5%). Non-UIM leaders, who are overrepresented in our sample, may have been or felt obligated to report being satisfied with the level of diversity in their workplace while also being aware of the need for more diversity [7,8].

Our survey and its results are constrained in a few ways. First, the survey may not reflect the opinions of GI and hepatology professionals who do not use electronic communication because it was distributed electronically. Notwithstanding, given the high utilization of electronic correspondence in the clinical fields, we accept that the effect of this potential constraint is probable minor. Second, in light of recent national events and the pressure to agree or disagree with media themes and sentiments, there may be some responder bias. However, we believe that the survey's anonymity and self-response structure increase the likelihood of accurate responses from participants. Overrepresentation of UIM individuals and individuals in leadership positions may also contribute to responder bias [9].

Thirdly, we were unable to determine an exact survey response rate due to multiple society memberships and the societies' desire to maintain member confidentiality. In the United States, approximately 11% of practicing gastroenterologists are from a UIM background, whereas nearly 19.9% of survey participants were UIM individuals. Fourth, since the Research Electronic Data Capture software does not prevent survey participants from completing a survey more than once, it is possible that multiple responses from a single individual skewed the results and response rate. The inability to investigate mixed-race individuals' perspectives may also be a limitation [10].

Conclusion

Our study has much strength despite these limitations. It is the first of its kind

to look at how practicing GI and hepatology professionals view race, ethnicity, and diversity, as well as how to increase UIM representation through interventions. A large and diverse sample of adult and pediatric GI and hepatology providers in academic and private practice settings across the United States is included in the survey, which also provides information about current demographic and professional characteristics. There was a wide range of racial and ethnic backgrounds represented in the survey participants, with women and members of racial and ethnic minority groups particularly well represented.

The significance and value of this topic for these groups may be reflected in the demographics of the survey participants. However, 64.6% of survey participants said they did not identify as UIM, and the survey results show that the majority of respondents did not identify as UIM. Additionally, the disparity in satisfaction with workplace diversity among GI and hepatology physicians based on race and ethnicity is emphasized by our survey. While 78% of White physicians were very or somewhat satisfied, 63% of Black physicians were very or somewhat dissatisfied with workplace diversity. Basically, people who aren't UIM and aren't necessarily impacted by a lack of diversity are less likely to see it as a big problem.

Acknowledgement

None.

Conflict of Interest

None.

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