Challenges to Research recruitment in diverse Hispanic, Non-Hispanic White and Black pediatric pain cohorts

Carlos J Ortiz Cotto,[1,2] X Soler, [1] J Kumar, [1,3] D Atkinson, [1,4] L McLaughlin, [1] A Chima, [1] M Mitchell, [5] V Chidambaran [1]

Affiliations: [1] Dept of Anesthesia, Cincinnati Children's Hospital Medical Center, [2]Interamerican University of Puerto Rico Metropolitan Campus, [3]University of Cincinnati, [4]Ohio University, [5]Division of Behavioral Medicine Clinical Psychology, CCHMC

Introduction & Aims

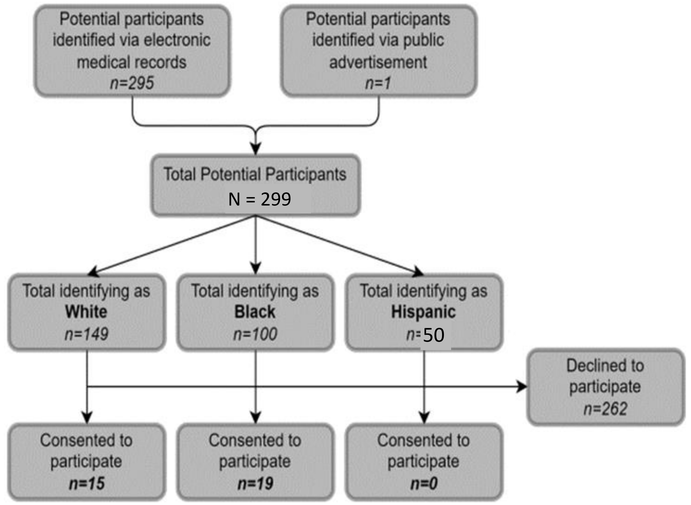
- The inclusion of participants of diverse ethnicities and backgrounds is important for generalization of study results and understanding of race-ethnic specific factors in pediatric pain.[1,2]
- We planned to recruit Non-Hispanic White (NHW), Non-Hispanic Black (NHB) and Hispanic children and their caregivers for a mixed methods study aimed at an empathic understanding of painful experiences in diverse pediatric patients.
- Here, we present a descriptive and comparative analyses of challenges in recruitment of diverse study cohorts.

Methods

- Flyers were used in community settings and electronic medical records were screened to identify children aged 8 to 17 years with acute pain experiences within the past 2 years (but not currently hospitalized).
- Children/parents self-identified as White, Black and/or Hispanic in their response to the flyers and in EMR.
- Screened patients were approached by phone calls (in their spoken language) and email using standardized scripts (maximum 3 calls, with Voicemails when possible, and follow up emails).
- The study was explained and they were invited to provide informed consent/assent to participate in online focus groups and questionnaire completion via Redcap.
- Screening and recruitment logs were maintained.
- Responses were compared for successful contact with initial call, number of calls needed to successfully reach patient, success with recruitment and reasons for declining to participate.
- In all, age/sex matched Hispanic, NHW and NHB groups (N=50 each) recruitment logs were compared..

Results

Average age of all cohorts were 12.9 (SD 2.2) and 57% female.



While interest in participation was overall low, compared to NHW and NHB groups, Hispanic cohorts had a lower rate of contact success rate, needed higher number of calls for successful contact and had a lower rate of recruitment (Table 1).
Barriers for recruitment common across and unique to each group are presented.

Table 1: Characteristics of recruitment among different cohorts

	White (N=50)	Black (N=50)	Hispanic (N=50)
First call success	18/50 (36%)	28/50 (56%)	7/50 (14%)
Contact success	20/50 (46%)	31/50 (62%)	18/50 (36%)
Interested	7/20 (35%)	23/31 (74%)	7/18 (38%)
Consented	4/7 (50%)	7/23 (33%)	1/7 (14%)
Reasons for declining the study (of those contacted)	No reason/lack of interest (N=9) Child schedule conflict (N=2) Vacation (N=1) Too busy (N=1) Unable to reach later/child refused (N=3)	No reason/lack of interest (N=11) Child refused (N=4) Lack of time (N=4) Unable to reach later (N=4)	No reason/lack of interest (N=8) Work issues/schedule conflict (N=2) Lack of internet platform/knowledge (N=2) Not willing to participate in Focus groups (N=1)

Conclusion

- Lack of interest and time/availability were common reasons for declining research participation in NHB, NHW and Hispanic cohorts.
- Factors related to access, internet knowledge, resources and availability were noted to be a barrier for recruitment in Hispanic cohort.
- This is an important consideration in the post-COVID era as use of telehealth and online research approaches are increasingly used for research.
- Our findings suggest need for flexibility with increased availability for research participation opportunities on weekends/evening times to accommodate work conflicts, in-person meetings to overcome technology challenges and use of simple instruction manuals for use of Zoom.
- Changing the approach to reflect needs of families and specific communities can improve inclusion and diversity of study cohorts.

References

1. Shea, L et. al. *Health Expect*. 2022; 25: 1979- 1987
2. Mossey JM. Clin Orthop Relat Res. 2011;469(7):1859-1870

Acknowledgement

This study was funded by the Cincinnati Children's **CCTST Integrating Special Populations Health Grant**