

Introduction

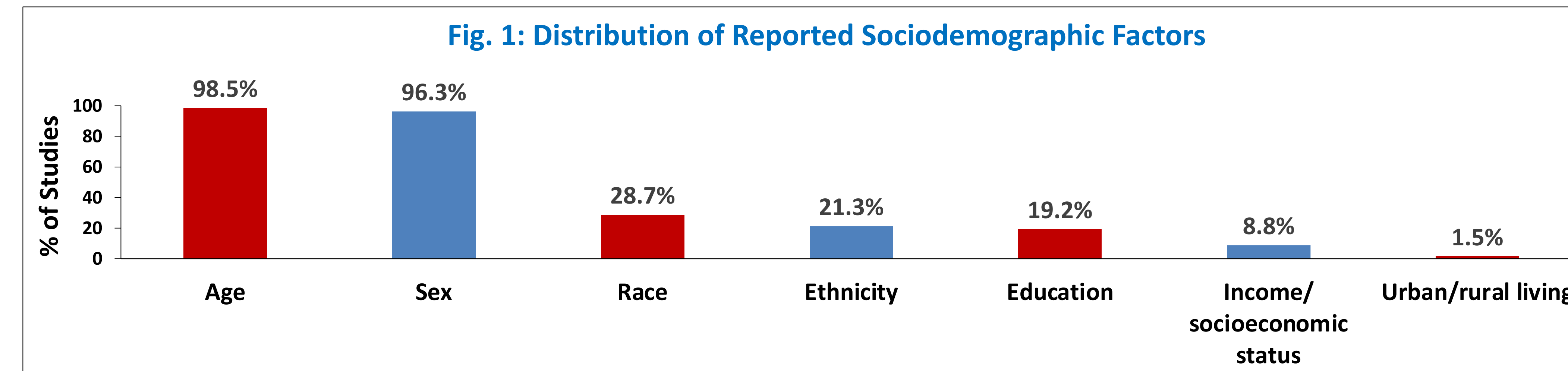
- As awareness of the effects of sociodemographic factors on health and disease continues to expand, there is growing recognition of the need to increase the diversity of participants in clinical studies.
- This may be particularly important in the field of pain medicine, given the complex nature of pain, as well as increasing evidence of the role of various sociodemographic factors in the prevalence and severity of pain.^{1,2}
- This study was conducted to examine the reporting of sociodemographic factors in the current pain medicine literature.

Methods

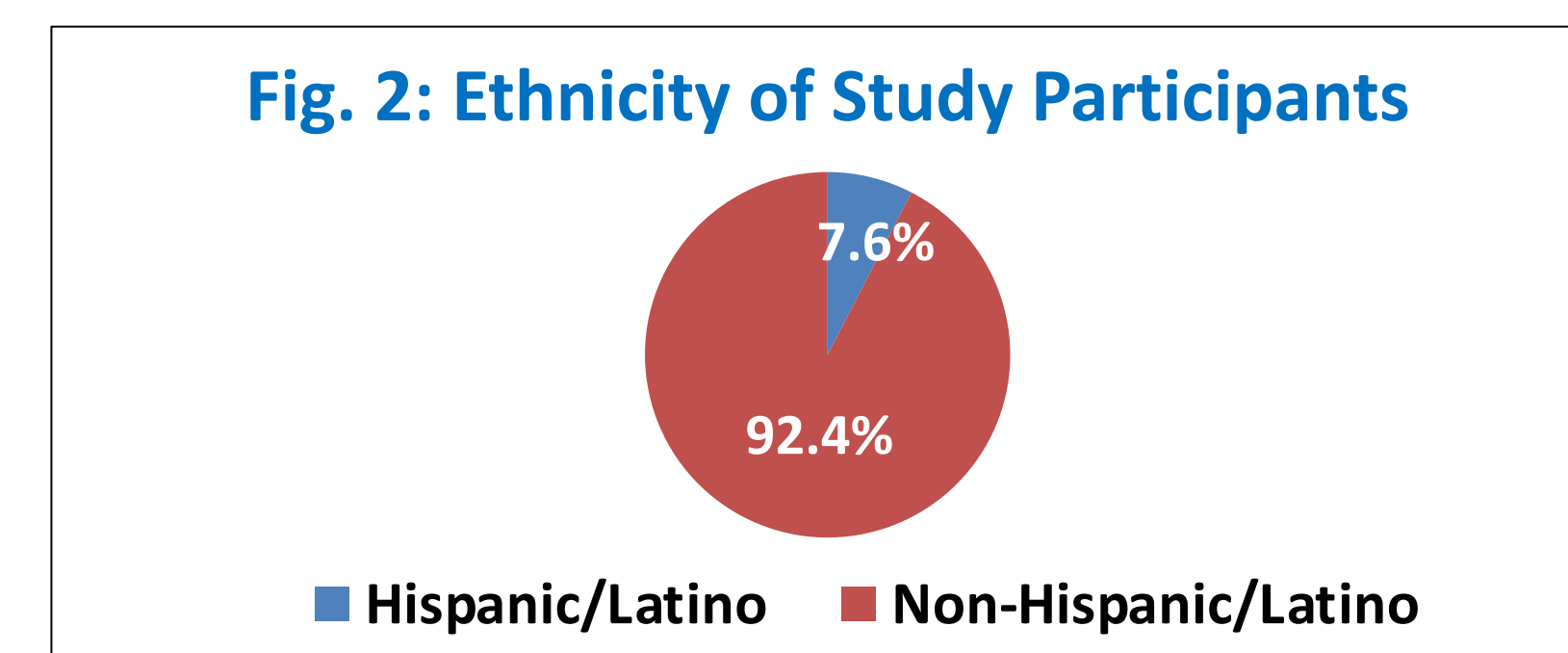
- This study evaluated original clinical research studies published from January 2023 to June 2023 in 3 major pain medicine journals: *Pain Medicine*, *Pain*, and *Regional Anesthesia & Pain Medicine*.
- All randomized clinical trials (RCTs) and observational studies evaluating acute pain, chronic pain, or general pain issues (eg, pain thresholds, pain assessment methods) published during the study period were included.
- Studies involving solely regional anesthesia issues (eg, spread of local anesthetic, bloody taps) were excluded. Case reports, case series (≤ 10 participants), review articles, and meta-analyses were likewise excluded.
- Reporting of the following sociodemographic characteristics was recorded for each study: participant age, sex, race, ethnicity, income/socioeconomic status, education level, and urban/rural living status.
- Institutional review board approval was waived for this literature-based study.

Results

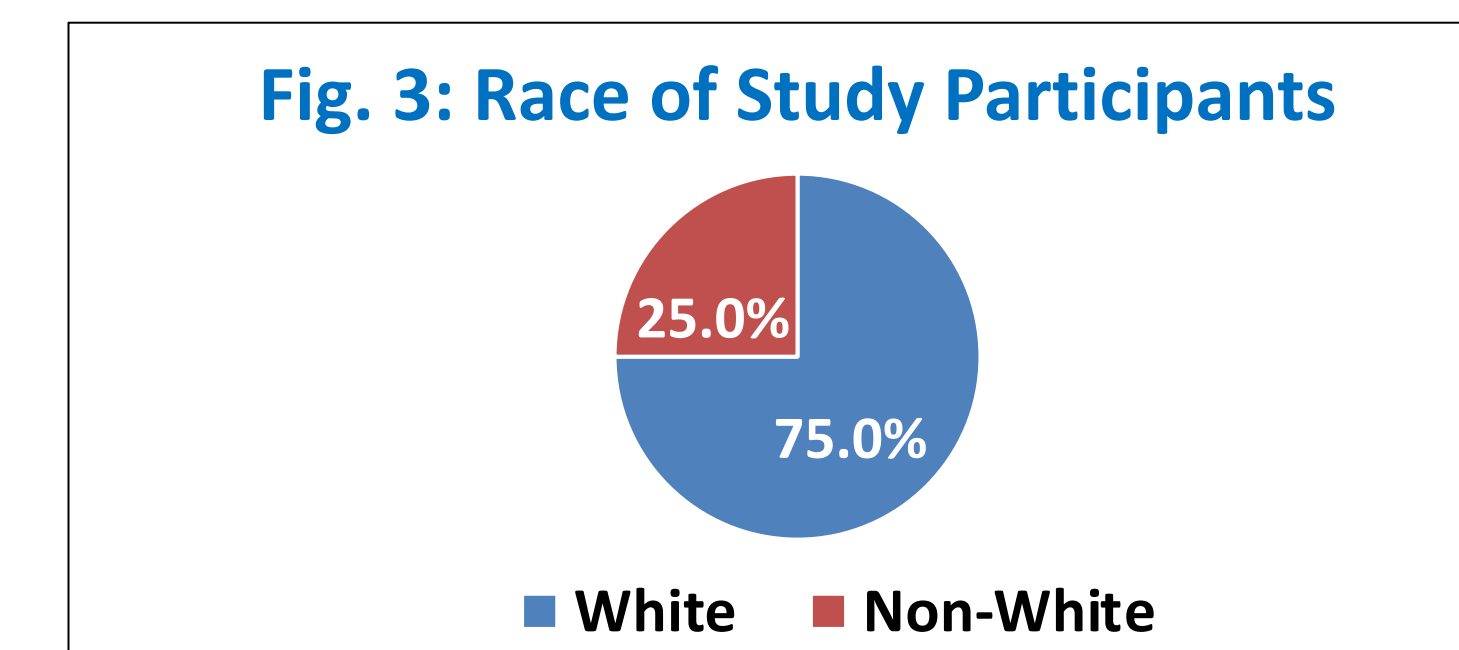
- A total of 136 studies were evaluated: 69 from *Pain*, 39 from *Pain Medicine*, and 28 from *Regional Anesthesia & Pain Medicine*.
- The studies consisted of 39 RCTs and 97 non-RCTs.
- The focus was chronic pain in 91 studies, acute pain in 34 studies, and general pain issues in 11 studies.
- Four studies (2.9%) specifically focused on diversity-related issues** (eg, sex differences, racial disparities, underserved populations).



- Age and sex:** Age was reported in 134 of the 136 studies (98.5%). Sex was reported in 131 of the 136 studies (96.3%). The age and sex distributions in each study appeared to reflect the objectives of the study.
- Ethnicity:** Reported in 29 of the 136 studies (21.3%). Ethnicity was usually reported as Hispanic/Latino versus non-Hispanic/Latino, with Hispanic/Latino accounting for a median of 7.6% of participants (range, 0-37.2%) in each study.
- Race:** Reported in 39 of the 136 studies (28.7%). White was the most common race, accounting for a median of 75.0% of participants (range, 14.5-98.7%) in each study.



- Education level:** Reported in 25 of the 130 non-pediatric studies (19.2%).



- Income/socioeconomic status:** Reported in 12 of the 136 studies (8.8%). Most studies reported annual family income; some reported other measures (eg, area deprivation index, Townsend deprivation quartile).
- Urban/rural living:** Reported in 2 of the 136 studies (1.5%).

Discussion

- Current clinical studies in the field of pain medicine almost always reported age and sex of study participants, a commendable finding.
- However, other sociodemographic factors were reported in only 1.5% to 28.7% of studies.
- When potentially important sociodemographic information is not provided, it is difficult for clinicians to know whether the results are applicable for a specific patient. Providing precision pain medicine relies on understanding the needs of individual patients based on their sociodemographic characteristics.
- There was considerable variation in the percentages of specific races and ethnic groups included in the studies, which may at least partly reflect differences in study objectives.
- Among studies reporting race, the median percentage of White study participants was almost identical to the percentage in the US general population (2022 census): 75.0% vs 75.5%.
- Among studies reporting ethnicity, the median percentage of Hispanic/Latino participants was lower than the percentage in the US general population (2022 census): 7.6% vs 19.1%. Thus, Hispanic/Latino may be an underrepresented group in current pain literature.
- A recent editorial authored by editors of 8 pain journals, including *Pain Medicine* and *Pain*, called for greater inclusion, diversity, and equity in pain medicine research and suggested strategies to accomplish this.³ These strategies included providing comprehensive data regarding demographic characteristics of study participants.

References

- Liu J, Wang C, Gao Y, et al. Sex-specific associations between preoperative chronic pain and moderate to severe chronic postoperative pain in patients 2 years after cardiac surgery. *J Pain Res.* 2022;15:4007-4015.
- Perez LG, Schell TL, Richmond TS, et al. Racial and ethnic disparities in chronic pain following traumatic injury. *Pain Med.* 2023;24(6):716-719.
- Palermo TM, Davis KD, Bouhassira D, et al. Promoting inclusion, diversity, and equity in pain science. *Pain.* 2023;164(2):217-220.