Comparison of sample characteristics in two pregnancy cohorts: community-based versus population-based recruitment methods

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Abstract

Background
One of the biggest challenges for population health studies is the recruitment of participants. Questions that investigators have asked are "who volunteers for studies?" and "does recruitment method influence characteristics of the samples?" The *purpose* of this paper was to compare sample characteristics of two unrelated pregnancy cohort studies taking place in the same city, in the same time period, that employed different recruitment strategies, as well as to compare the characteristics of both cohorts to provincial and national statistics derived from the Maternity Experiences Survey (MES).

Methods
One pregnancy cohort used community-based recruitment (e.g. posters, pamphlets, interviews with community media and face-to-face recruitment in maternity clinics); the second pregnancy cohort used both community-based and population-based (a centralized system identifying pregnant women undergoing routine laboratory testing) strategies.

Results
The pregnancy cohorts differed in education, income, ethnicity, and foreign-born status ($p < 0.01$), but were similar for maternal age, BMI, and marital status. Compared to the MES, the lowest age, education, and income groups were under-represented, and the cohorts were more likely to be primiparous.

Conclusions
The findings suggest that non-stratified strategies for recruitment of participants will not necessarily result in samples that reflect the general population, but can reflect the target population of interest. Attracting and retaining young, low resource women into urban studies about pregnancy may require alternate and innovative approaches.