

Pregnancy Care and Access Among Black-African and Black-Caribbean Medically Uninsured Pregnant People Attending a Toronto Walk-In Clinic: A 10-Year Retrospective Chart Review

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Abstract

Background

Black maternal health inequities in Canada and other western nations are increasingly understood as shaped by structural racism, migration-related exclusion, and differential access to care rather than by biological difference. Medically uninsured pregnant people may delay prenatal care because of cost, administrative exclusion, and fear of health and immigration systems. Canadian evidence describing Black medically uninsured pregnant people in clinical settings remains limited.

Methods

We conducted a retrospective chart review of routinely collected clinical and intake data from pregnant people seen between July 1, 2013, and June 30, 2023, at a Toronto walk-in clinic serving medically uninsured residents. Race and country of origin were self-reported on intake forms. Analyses preserved Black-African and Black-Caribbean subgroup specificity. The final analytic cohort included 1,158 pregnant people: 114 Black-African, 119 Black-Caribbean, and 925 non-Black/other clinic participants. Descriptive statistics used variable-specific denominators. Prespecified pooled Black versus non-Black/other comparisons were summarized using risk ratios with 95% confidence intervals.

Results

Black-African and Black-Caribbean participants differed across relationship status, education, household composition, transit burden, prior prenatal care, and gestational age at presentation. Mean gestational age at first presentation was 22.12 weeks among Black-African participants and 17.61 weeks among Black-Caribbean participants, compared with 14.71 weeks among non-Black/other clinic participants. In pooled comparisons, Black participants were more likely to present after the first trimester (63.2% vs. 40.3%; RR 1.57, 95% CI 1.38–1.78) and in the third trimester (34.1% vs. 17.8%; RR 1.92, 95% CI 1.52–2.42). Any prior prenatal care was more common among Black participants (43.8% vs. 29.1%; RR 1.50, 95% CI 1.26–1.80), yet absent prenatal records at presentation among those with prior care was also more common (49.5% vs. 36.4%; RR 1.36, 95% CI 1.05–1.76). Anemia was more frequent among Black participants (14.2% vs. 4.8%; RR 2.98, 95% CI 1.94–4.57). Interpreter requirement was lower among Black participants (6.9% vs. 62.0%; RR 0.11, 95% CI 0.07–0.18).

Conclusions

In this uninsured clinic cohort, inequities for Black participants were concentrated upstream of referral through delayed prenatal entry, documentation discontinuity, and elevated anemia. The findings highlight how race and immigration-related exclusion intersect to shape access to prenatal care in Canada. They

also suggest that integrated provider models working across community and hospital settings may help reduce fragmentation and facilitate earlier entry into care for marginalized pregnant populations in Canada and other high-resource migrant-receiving countries. Midwives in many settings may be uniquely positioned to care for this population in terms of scope and interprofessional relationships. In this study midwifery-care within a walk-in model led to very low emergency hospital service use and loss to follow up; while at the same time appropriately diverting to higher level care as needed.

Background

Migration outside formally recognized or protected pathways has become an increasingly important feature of global mobility. The categories of “migrant,” “refugee,” “asylum seeker,” and “undocumented person” are often treated as discrete, but in practice they are shaped by overlapping global inequalities, political instability, conflict, labour demand, climate disruption, and immigration control (1). The World Health Organization has emphasized that people living outside regular migration pathways often face poorer access to health and social services than those who enter through recognized refugee or permanent pathways, while global displacement continues to rise (2–4). In this context, migration should not be understood simply as a matter of individual movement, but as a social and political process structured by unequal access to protection, recognition, and rights.

These migration patterns are also shaped by the global political economy. Colonial dispossession, extractive capitalism, conflict, environmental degradation, and uneven development all influence who is displaced and who is admitted through recognized pathways (5–8). High-income migrant-receiving countries frequently rely on migrant labour while simultaneously restricting access to permanent status, social protections, and health care. In the Canadian context, temporary and employer-tied migration programs, differential immigration categories, and the production of “illegality” are not neutral administrative arrangements; they help determine who can move safely, who remains deportable, and who becomes excluded from care and protection (9–13). At the same time, Canadian and broader Western extractive interests abroad complicate narratives of Canada as simply a benevolent receiving state. Scholarship on Canadian mining and economic extraction in Africa has described these relationships as ongoing forms of colonial power that contribute to dispossession, instability, and displacement (14). Climate change further intensifies these pressures, particularly where livelihoods, infrastructure, and political stability are already fragile (15).

Across high-income, high-migrant-receiving countries, these structural conditions produce a familiar paradox: strong health and social systems coexist with immigration and eligibility regimes that leave some populations outside routine access pathways. Canada is one such setting. Publicly funded access to physician and hospital services is largely contingent on provincial insurance eligibility, or in the case of refugee claimants federal coverage. In Ontario, the highest migrant receiving province, this means documented qualification and eligibility requirements with health care access varying by immigration category (16–20). As a result, some pregnant people—including undocumented residents, people with precarious or temporary status, and those facing documentation barriers—become medically uninsured

and may delay or avoid prenatal care because of anticipated cost, fear of disclosure, and difficulty navigating unfamiliar health systems (17–19, 21, 22).

These issues are especially important in Toronto, a major migrant-receiving city and a key site for examining how immigration exclusion is translated into everyday health inequity. Toronto Public Health has repeatedly identified medically uninsured residents as a population with substantial unmet needs, particularly in pregnancy and reproductive health care (23, 24). Canadian research on uninsured prenatal care has documented delayed engagement, inadequate care, and barriers to follow-up, but evidence remains limited, especially in low-barrier community settings that serve racialized and precariously documented populations (17, 25–27).

Black maternal health inequities in Canada must also be situated within this context of structural exclusion. Canadian scholarship has increasingly emphasized that Black perinatal inequities are shaped by anti-Black racism in health care and society, rather than by biological difference (28–32). Qualitative studies describe experiences of obstetric racism, mistrust, dismissal, and dehumanization in care, all of which may shape help-seeking, continuity, and perceived safety (28, 30). These dynamics are especially relevant for medically uninsured Black populations, who may experience overlapping forms of marginalization through race, migration status, poverty, and exclusion from insurance-based access. Importantly, Black populations are not homogeneous. Black-African and Black-Caribbean people may encounter the health system through different migration pathways, legal statuses, family structures, and settlement trajectories, and those differences may shape how prenatal care is accessed and experienced.

This study addresses a gap in the literature by examining the sociodemographic, access, prenatal-care, and clinical characteristics of Black-African and Black-Caribbean medically uninsured pregnant people attending a low-barrier Toronto clinic. A limited set of prespecified service-relevant outcomes were used for comparison with non-Black medically uninsured clinic participants. The non-Black/other comparator group was also medically uninsured and structurally marginalized. Comparisons are therefore interpreted as gradients within structural exclusion, not as contrasts with an advantaged or normative population. The comparator is included only for prespecified access and care-trajectory outcomes that are clinically actionable and service relevant. It should also be noted that only 9.8% of participants in the comparator cohort identified as White, with 91.2% being racialized.

Methods

Setting

A community health centre–based walk-in clinic in Toronto developed in response to unmet community need for low-barrier care for medically uninsured residents, including many who are undocumented or otherwise living with precarious immigration status (33). Pregnant patients were assessed in an

episodic, non-continuity model by a midwife focused on clinical assessment, stabilization, and referral to ongoing prenatal care.

A distinctive feature of the model was that the clinic midwife worked across community and hospital settings, including affiliation with a local community midwifery practice and privileges at 2 community hospitals, which enabled direct referral to outpatient prenatal and specialist services when indicated. In Ontario, community health centres and midwifery are among the few publicly funded access points through which uninsured residents may obtain pregnancy-related primary care, laboratory investigations, and some specialist services without full out-of-pocket payment, although both sectors often operate at or beyond capacity for this population (34, 35).

Participants

This study used a retrospective cohort of pregnant people seen by a midwife at a community health center based walk-in clinic focused on serving undocumented and uninsured residents of Toronto, between July 1, 2013, and June 30, 2023. The chart review identified 1,324 charts. After exclusion of duplicates (124), charts with no or minimal documentation (21), and newborn charts (9), 1,170 pregnant people remained eligible. This was further subdivided into participants who self-identified Black. Yielding 114 people who identified as Black-African, 119 as Black Caribbean and 12 from a variety of other countries including the United States (See Fig. 1). Because of very low numbers 12 participants who identified as Black from regions outside Africa and the Caribbean were excluded because the cell sizes were too small for meaningful subgroup interpretation. The final analytic cohort therefore included 1,158 pregnant people: 114 Black-African, 119 Black-Caribbean, and 925 non-Black/other clinic participants.

Data collection

Clinical and pregnancy variables were abstracted from electronic medical records. Sociodemographic variables were obtained from standardized intake forms completed during routine clinic registration. Race and country of origin were self-reported on intake forms with Black-African and Black-Caribbean being two of nine options in a list of race/ethnic origin. Variable availability differed across domains because clinic forms evolved over time and were not uniformly complete.

Measures

Descriptive cohort characteristics demographics, access variables, prenatal timing and continuity variables, pregnancy comorbidities and complications, and pregnancy risk classification and referral patterns.

The primary prespecified outcome was presentation after the first trimester. Secondary service-relevant outcomes were third-trimester presentation, prior prenatal care, absent prenatal records among those

with prior care, interpreter requirement, charted anemia (Hemoglobin value < 105 g/L), high-risk pregnancy classification, and urgent referral to the emergency department or labour and delivery triage.

Table 1
Variables collected

Descriptive characteristics	Age, relationship status, education, income, household composition, number of people supported by income
Access variables	Distance from clinic, public transit time, language spoken at home, and interpreter requirement
Prenatal timing and continuity variables	Gestational age at first clinic presentation, prior prenatal care, and previous prenatal record availability
Reproductive-history	Gravida, term births, preterm birth history, living children, prior neonatal death or stillbirth, and previous Caesarean among those with available prior birth history
Pregnancy comorbidities and complications	Anemia, diabetes, hypertension, other medical conditions, urinary tract infection, infectious disease, nausea and vomiting of pregnancy, bleeding, pregnancy loss, abnormal ultrasound
Risk and referral variables	Pregnancy risk categorization and referral destination

Analysis

Analyses were primarily descriptive and used variable-specific denominators. Categorical variables are presented as counts and proportions with Wilson 95% confidence intervals (CI). Continuous variables are summarized using mean $\pm$ standard deviation and 95% CI where appropriate. Prespecified pooled Black versus non-Black/other outcomes are summarized using risk ratios with 95% CI. Exploratory subgroup variables, especially multicategory sociodemographic variables, reproductive-history variables, and sparse clinical outcomes, are interpreted descriptively. Analyses were conducted in IBM SPSS Statistics, version 31.0.

Ethics statement

Ethics approval

was obtained from the University of Toronto Research Ethics Board (REB 2022-064) and Toronto Metropolitan University Research Ethics Board (2022-064-4). The requirement for individual informed consent was waived because the study used retrospective, de-identified chart review data.

Results

Sociodemographic Characteristics

Black-African and Black-Caribbean participants differed descriptively across relationship status, education, migration pathway, household composition, and years in Canada (Table 1). Overall, Black-Caribbean participants were more likely to report being single, having secondary education, entering Canada on a visitor visa, and living in extended-family or sibling households, whereas Black-African participants more often reported being common-law or married, having post-secondary education, entering through humanitarian or compassionate pathways, and living in couple-with-children households.

Among those with available data, 76.0% of Black-African participants were common-law or married (95% CI 66.6–83.5), compared with 36.6% of Black-Caribbean participants (95% CI 27.9–46.4). Conversely, 21.9% of Black-African participants were single (95% CI 14.8–31.1), compared with 60.4% of Black-Caribbean participants (95% CI 50.6–69.4).

Educational attainment also differed between groups. Secondary education was more common among Black-Caribbean participants (61.8%, 95% CI 52.5–70.3), while post-secondary education was more common among Black-African participants (57.1%, 95% CI 47.2–66.4), compared with 33.6% among Black-Caribbean participants (95% CI 25.4–43.0).

Household income distributions reflected both low reported income and substantial uncertainty. Income below \$30,000 was reported by 32.7% of Black-African participants (95% CI 24.7–41.8) and 38.8% of Black-Caribbean participants (95% CI 30.5–47.8). However, a large proportion selected “Do not know” (42.7% and 37.1%, respectively) or “Prefer not to answer” (18.2% and 22.4%), and higher-income categories were sparsely represented. Accordingly, income is interpreted descriptively and not used for subgroup comparisons.

Household composition further differed between groups. Extended-family or sibling households were more common among Black-Caribbean participants (25.5%, 95% CI 17.9–34.9) than Black-African participants (3.4%, 95% CI 1.2–9.6), whereas couple-with-children households were more frequently reported among Black-African participants (40.2%, 95% CI 30.6–50.7) compared with Black-Caribbean participants (21.3%, 95% CI 14.6–29.9).

Age distributions were similar between groups.

Table 2
Demographic characteristics of Black-African and Black-Caribbean participants

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Relationship status	n = 96; missing = 18	n = 101; missing = 18
Common-law or married	73 (76.0) (66.6–83.5)	37 (36.6) (27.9–46.4)
Single	21 (21.9) (14.8–31.1)	61 (60.4) (50.6–69.4)
Separated/divorced	2 (2.1) (0.6–7.3)	3 (3.0) (1.0–8.4)
Highest education level	n = 98; missing = 16	n = 110; missing = 9
No formal education	4 (4.1) (1.6–10.1)	0 (0.0) (0.0–3.4)
Primary	5 (5.1) (2.2–11.3)	5 (4.5) (2.0–10.1)
Secondary or equivalent	33 (33.7) (25.0–43.6)	68 (61.8) (52.5–70.3)
University/college/post-secondary	56 (57.1) (47.2–66.4)	37 (33.6) (25.4–43.0)
Annual household income	n = 110; missing = 4	n = 116; missing = 3
< 30,000	36 (32.7) (24.7–41.8)	45 (38.8) (30.5–47.8)
30,000–59,999	7 (6.4) (3.1–12.6)	0 (0.0) (0.0–3.2)
> 60,000	0 (0.0) (0.0–3.4)	1 (0.9) (0.2–4.7)
Do not know	47 (42.7) (33.9–52.0)	43 (37.1) (28.2–46.2)
Prefer not to answer	20 (18.2) (12.0–26.6)	26 (22.4) (15.7–30.9)
Household composition	n = 87; missing = 27	n = 94; missing = 25
Single	21 (24.1) (16.3–34.2)	14 (14.9) (9.0–23.7)
Couple without child	16 (18.4) (11.6–27.8)	13 (13.8) (8.2–22.3)
Couple with children	35 (40.2) (30.6–50.7)	20 (21.3) (14.6–29.9)
Extended family/siblings	3 (3.4) (1.2–9.6))	24 (25.5) (17.9–34.9)
Unrelated housemates	6 (6.9) (3.2–14.3)	13 (13.8) (8.2–22.3)
Prefer not to answer	6 (6.9) (3.2–14.3)	10 (10.6) (5.9–18.3)
Number of people supported by income	n = 95; missing = 19	n = 105; missing = 9
Mean ± SD (95% CI)	2.91 ± 1.92 (2.38–3.44)	2.77 ± 1.49 (2.37–3.17)
Do not know	18 (18.9) (12.5–27.6)	23 (21.9) (15.2–30.5)
Prefer not to answer	24 (25.3) (17.6–34.9)	26 (24.8) (17.5–33.9)

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Age, years	n = 114; missing = 0	n = 118; missing = 1
Mean ± SD (95% CI)	30.37 ± 4.83 (29.47–31.26)	31.56 ± 5.94 (30.49–32.64)

Table note: Values are n (%) with Wilson 95% confidence intervals unless otherwise stated. Continuous variables are presented as mean ± SD with 95% confidence intervals. Denominators vary because of variable-specific missingness.

Access: Black-African versus Black-Caribbean

Access characteristics are summarized descriptively in Table 2. Geographic distance to the clinic was broadly similar across Black subgroups. Transit time varied descriptively: 24.6% of Black-African participants reported travel times greater than 60 minutes (95% CI 17.6–33.2), compared with 14.4% of Black-Caribbean participants (95% CI 9.2–21.9). Black-Caribbean participants more often reported travel times of 30 minutes or less: 44.9% (95% CI 36.2–53.9) compared with 30.7% among Black-African participants (95% CI 23.0–39.7).

English was the predominant language spoken at home in both groups, but the proportion was higher among Black-Caribbean participants. Among those with available data, 99.2% of Black-Caribbean participants and 76.3% of Black-African participants reported English as the language spoken at home.

Interpreter requirement was uncommon in both Black subgroups, especially among Black-Caribbean participants. Interpreter requirement was documented for 12.3% of Black-African participants (95% CI 7.5–19.6) and 1.7% of Black-Caribbean participants (95% CI 0.5–5.9). These findings suggest that language barriers alone are unlikely to explain later presentation among Black participants, although interpreter requirement is an imperfect proxy for communication barriers, trust, discrimination, or administrative exclusion.

Table 3
Access characteristics by subgroup.

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Distance from clinic (km)	n = 114; missing = 0	n = 118; missing = 1
≤ 10	61 (53.5) (44.4–62.4)	69 (58.5) (49.5–67.0)
10.1–20	30 (26.3) (19.1–35.1)	35 (29.7) (22.2–38.4)
> 20	23 (20.2) (13.8–28.5)	14 (11.9) (7.2–18.9)
Public transit time to clinic (minutes)	n = 114; missing = 0	n = 118; missing = 1
≤ 30	35 (30.7) (23.0–39.7)	53 (44.9) (36.2–53.9)
31–60	51 (44.7) (35.9–53.9)	48 (40.7) (32.2–49.7)
> 60	28 (24.6) (17.6–33.2)	17 (14.4) (9.2–21.9)
Language spoken at home	n = 114; missing = 0	n = 118; missing = 1
English	87 (76.3) (67.7–83.2)	117 (99.2) (95.4–99.9)
Other	27 (23.7) (16.8–32.3)	1 (0.8) (0.1–4.6)
Interpreter required	n = 114; missing = 0	n = 119; missing = 0
Yes	14 (12.3) (7.5–19.6)	2 (1.7) (0.5–5.9)
No	100 (87.7) (80.4–92.5)	117 (98.3) (94.1–99.5)

Table note: Values are n (%) with Wilson 95% confidence intervals. Denominators vary because of variable-specific missingness.

Pregnancy timing, prior prenatal care, and documentation continuity

Gestational age at first NIWIC presentation differed across Black subgroups [Table 3]. Black-African participants presented later on average, with mean gestational age of 22.12 weeks (95% CI 20.01–24.23), compared with 17.61 weeks among Black-Caribbean participants (95% CI 15.71–19.51). Gestational age category distributions were consistent with this pattern: 45.5% of Black-African participants presented at 27 weeks or later (95% CI 36.5–54.8), compared with 22.7% of Black-Caribbean participants (95% CI 15.9–31.4).

Prior prenatal care patterns also differed. Black-Caribbean participants more often had no documented prior prenatal care, at 69.0% (95% CI 60.0–76.8), compared with 43.4% among Black-African participants (95% CI 34.6–52.6). Black-African participants more often had prior prenatal care overseas, at 44.2% (95% CI 35.4–53.4), compared with 12.4% among Black-Caribbean participants (95% CI 7.5–19.7).

Among participants with documented prior prenatal care, prenatal records were available for 42.2% of Black-African participants (95% CI 30.9–54.4) and 65.7% of Black-Caribbean participants (95% CI 49.2–79.2).

Table 4
Prenatal timing, prior prenatal care, and prenatal records.

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Prior prenatal care	n = 113; missing = 1	n = 113; missing = 6
No	49 (43.4) (34.6–52.6)	78 (69.0) (60.0–76.8)
Yes—Canada	13 (11.5) (6.8–18.7)	20 (17.7) (11.8–25.8)
Yes—Overseas	50 (44.2) (35.4–53.4)	14 (12.4) (7.5–19.7)
Yes—Both	1 (0.9) (0.2–4.8)	1 (0.9) (0.2–4.8)
Has prenatal records among those with prior prenatal care	n = 64 (conditional denominator); missing = 0	n = 35 (conditional denominator); missing = 0
No	37 (57.8) (45.6–69.1)	12 (34.3) (20.8–50.8)
Yes	27 (42.2) (30.9–54.4)	23 (65.7) (49.2–79.2)
Gestational age at presentation (weeks)	n = 110; missing = 4	n = 110; missing = 9
Mean ± SD (95% CI)	22.12 ± 11.16 (20.01–24.23)	17.61 ± 10.07 (15.71–19.51)
Gestational age category	n = 110; missing = 4	n = 110; missing = 9
0–13 weeks	34 (30.9) (23.0–40.1)	47 (42.7) (33.9–52.1)
14–26 weeks	26 (23.6) (16.7–32.4)	38 (34.5) (26.3–43.8)
27 + weeks	50 (45.5) (36.5–54.8)	25 (22.7) (15.9–31.4)

Table note: Values are n (%) with Wilson 95% confidence intervals unless otherwise stated. Continuous variables are presented as mean ± SD with 95% confidence intervals.

Reproductive history

Reproductive-history variables are presented descriptively. Continuous count variables are summarized as mean ± SD with 95% confidence intervals.

Reproductive-history variables were broadly similar across Black-African and Black-Caribbean participants in descriptive summaries [Table 4]. Mean gravida was 2.52 ± 1.41 (2.26–2.79) among Black-African participants and 2.79 ± 1.86 (2.44–3.13) among Black-Caribbean participants. Mean term births were 0.92 ± 0.97 (0.74–1.10) and 1.09 ± 1.43 (0.82–1.36), respectively. Preterm birth history, living

children, prior neonatal death or stillbirth, and previous Caesarean among those with available prior birth history did not show large descriptive subgroup differences.

Prior Caesarean was documented in 35.9% of Black-African participants with prior birth history (95% CI 25.3–48.2) and 32.3% of Black-Caribbean participants (95% CI 22.2–44.4). Because these variables were exploratory and conditional on prior pregnancy history, formal subgroup inference is not emphasized.

Table 5
Reproductive history by subgroup

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Gravida	n = 111; missing = 3	n = 112; missing = 7
Mean ± SD (95% CI)	2.52 ± 1.41 (2.26–2.79)	2.79 ± 1.86 (2.44–3.13)
Term births	n = 111; missing = 3	n = 113; missing = 6
Mean ± SD (95% CI)	0.92 ± 0.97 (0.74–1.10)	1.09 ± 1.43 (0.82–1.36)
Preterm birth history	n = 111; missing = 3	n = 113; missing = 6
0	104 (93.7) (87.6–96.9)	105 (92.9) (86.6–96.4)
1	7 (6.3) (3.1–12.4)	8 (7.1) (3.6–13.4)
Living children	n = 114; missing = 0	n = 119; missing = 0
Mean ± SD (95% CI)	0.88 ± 0.95 (0.70–1.05)	1.10 ± 1.43 (0.84–1.36)
Neonatal death / stillbirth history	n = 114; missing = 0	n = 119; missing = 0
0	108 (94.7) (89.0–97.6)	116 (97.5) (92.8–99.1)
1	6 (5.3) (2.4–11.0)	3 (2.5) (0.9–7.2)
Previous Caesarean among those with previous birth history	n = 64; missing = 0	n = 65; missing = 0
No	41 (64.1) (51.8–74.7)	44 (67.7) (55.6–77.8)
Yes	23 (35.9) (25.3–48.2)	21 (32.3) (22.2–44.4)

Table note: Values are n (%) with Wilson 95% confidence intervals unless otherwise stated. Continuous variables are presented as mean ± SD with 95% confidence intervals.

Pregnancy comorbidities and complications

Most documented pregnancy comorbidities and complications were uncommon [Table 5]. Anemia was documented in 13.2% (8.1–20.6) of Black-African participants and 15.1% (9.8–22.6) of Black-Caribbean participants. Diabetes, hypertension, urinary tract infection, infectious disease, pregnancy loss, abnormal ultrasound, Rh-negative status, and rubella non-immunity were generally similar in descriptive summaries or, in the case of positive serology, too sparse for stable subgroup inference.

Nausea/vomiting of pregnancy and bleeding appeared more frequent among Black-Caribbean participants in descriptive summaries, potentially reflecting differences in timing of presentation, although this possibility was not formally assessed. Nausea/vomiting was documented in 16.8% (11.2–24.5) of Black-Caribbean participants, compared with 6.1% (3.0–12.1) of Black-African participants. Bleeding was documented in 9.2% (5.2–15.8), of Black-Caribbean participants, compared with 1.8% (0.5–6.2) of Black-African participants. However, given small cell counts these patterns are interpreted cautiously.

Anemia is considered separately as a prespecified service-relevant outcome in pooled Black versus non-Black/other comparisons.

Table 6
Pregnancy comorbidities and complications by subgroup.

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Pregnancy comorbidities	n = 114; missing = 0 n (%), 95% CI	n = 119; missing = 0
Advanced maternal age	3 (2.6) (0.9–7.5)	10 (8.4) (4.6–14.8)
Anemia	15 (13.2) (8.1–20.6)	18 (15.1) (9.8–22.6)
Diabetes	4 (3.5) (1.4–8.7)	8 (6.7) (3.4–12.7)
Hypertension	4 (3.5) (1.4–8.7)	9 (7.6) (4.0–13.8)
Medical condition	22 (19.3) (13.1–27.5)	13 (10.9) (6.5–17.8)
Urinary tract infection	6 (5.3) (2.4–11.0)	7 (5.9) (2.9–11.6)
Sexually transmitted or blood borne infection	7 (6.1) (3.0–12.1)	6 (5.0) (2.3–10.6)
Alcohol use	0 (0.0) (0.0–3.3)	2 (1.7) (0.5–5.9)
Cigarette use	3 (2.6) (0.9–7.5)	1 (0.8) (0.1–4.6)
Cannabis use	0 (0.0) (0.0–3.3)	2 (1.7) (0.5–5.9)
Nausea/vomiting of pregnancy	7 (6.1) (3.0–12.1)	20 (16.8) (11.2–24.5)
Bleeding	2 (1.8) (0.5–6.2)	11 (9.2) (5.2–15.8)
Pregnancy loss	6 (5.3) (2.4–11.0)	8 (6.7) (3.4–12.7)
Rh negative	3 (2.6) (0.9–7.5)	1 (0.8) (0.1–4.6)
Rubella non-immune	17 (14.9) (9.5–22.6)	12 (10.1) (5.9–16.8)

Table Note: Values are n (%) with Wilson 95% confidence intervals. Comorbidities and complications are presented descriptively because this exploratory family contains multiple parallel comparisons and several sparse or zero-cell outcomes.

Pregnancy risk status, referral destination, and continuity

High-risk pregnancy was documented for 27.6% of Black-African participants (95% CI 20.0–36.8) and 22.9% of Black-Caribbean participants (95% CI 16.0–31.7) [Table 6]. Midwifery referral was documented for 73.1% of Black-African participants (95% CI 63.8–80.7) and 73.4% of Black-Caribbean participants (95% CI 64.4–80.8). ED/L&D referral was uncommon: 1.0% among Black-African participants (95% CI 0.2–5.2) and 0.9% among Black-Caribbean participants (95% CI 0.2–5.0).

Urgent referral to the emergency department or labour and delivery was uncommon in both groups. Lost to follow-up was documented for 3.8% of Black-African participants (95% CI 1.5–9.5) and 0.0% of Black-Caribbean participants (95% CI 0.0–3.4).

Table 7
Pregnancy risk status, referral destination, and continuity after presentation

Variable	Black-African (N = 114)	Black-Caribbean (N = 119)
Pregnancy risk status	n = 105; missing = 9	n = 109; missing = 10
Low risk	76 (72.4) (63.2–80.0)	84 (77.1) (68.3–84.0)
High risk	29 (27.6) (20.0–36.8)	25 (22.9) (16.0–31.7)
Referred to	n = 104; missing = 10	n = 109; missing = 10
Midwife	76 (73.1) (63.8–80.7)	80 (73.4) (64.4–80.8)
OB	19 (18.3) (12.0–26.8)	22 (20.2) (13.7–28.7)
Midwife and OB	3 (2.9) (1.0–8.1)	3 (2.8) (0.9–7.8)
Other	1 (1.0) (0.2–5.2)	3 (2.8) (0.9–7.8)
ED/L&D	1 (1.0) (0.2–5.2)	1 (0.9) (0.2–5.0)
Lost to follow-up	4 (3.8) (1.5–9.5)	0 (0.0) (0.0–3.4)

Prespecified pooled equity comparisons: Black versus non-Black/other clinic participants

For prespecified pooled comparisons, Black participants were more likely than non-Black/other medically uninsured clinic participants to present after the first trimester and in the third trimester [Table 7]. Presentation after the first trimester occurred in 63.2% of Black participants compared with 40.3% of non-Black/other participants: RR 1.57, 95% CI 1.38–1.78. Third-trimester presentation occurred in 34.1% of Black participants compared with 17.8% of non-Black/other participants: RR 1.92, 95% CI 1.52–2.42.

Interpreter requirement was substantially lower among Black participants: 6.9% versus 62.0%; RR 0.11, 95% CI 0.07–0.18. This pattern supports an analysis that language barriers alone are unlikely to explain later presentation among Black participants.

Any prior prenatal care was more common among Black participants: 43.8% versus 29.1%; RR 1.50, 95% CI 1.26–1.80. However, among those with prior care, absent prenatal records at presentation were also more common among Black participants: 49.5% versus 36.4%; RR 1.36, 95% CI 1.05–1.76. This suggests documentation discontinuity as a distinct access and quality mechanism.

Anemia was more frequent among Black participants: 14.2% versus 4.8%; RR 2.98, 95% CI 1.94–4.57. This should not be interpreted as an intrinsic or biologically determined difference. Rather, anemia may reflect upstream determinants such as nutrition insecurity, delayed care, chronic stress, constrained access to monitoring, and reduced access to supplements.

High-risk pregnancy classification and urgent ED/L&D referral were broadly similar in descriptive summaries.

Table 8
Prespecified pooled Black versus non-Black/other service-relevant outcomes.

Outcome	Black participants n/N (%)	Non-Black/other participants (%)	Risk ratio, 95% CI	Interpretation
Presentation after first trimester	139/220 (63.2%)	373/925 40.3%	1.57, 1.38– 1.78	Primary outcome
Third-trimester presentation	75/220 (34.1%)	165/925 17.8%	1.92, 1.52– 2.42	Key secondary
Interpreter required	16/233 (6.9%)	574/925 62.0%	0.11, 0.07– 0.18	Contextual access outcome
Any prior prenatal care	99/226 (43.8%)	269/925 29.1%	1.50, 1.26– 1.80	Key secondary; prior care status
Absent prenatal records among those with prior care	49/99 (49.5%)	98/269 36.4%	1.36, 1.05– 1.76	Conditional key secondary
Anemia	33/233 (14.2%)	44/925 4.8%	2.98, 1.94– 4.57	Key secondary

Table note: Risk ratios compare pooled Black participants with non-Black/other medically uninsured clinic participants. Denominators vary by outcome because of variable-specific missingness and conditional denominators. Prenatal-record absence is reported only among participants with documented prior prenatal care

Discussion

Interpretation and main contributions

This study is best understood as a structural access and equity analysis of prenatal care among medically uninsured pregnant people in Toronto, Canada, with a Black-centred focus. Its principal

contribution is descriptive: it documents social, access, and clinical context at the point uninsured patients reach a low-barrier community clinic, while preserving heterogeneity between Black-African and Black-Caribbean subgroups. This approach aligns with guidance to report race and ethnicity as socially situated categories and to avoid default biological interpretations (28–30, 32, 36, 37).

The clearest inequity signal was delayed prenatal entry, particularly among Black-African patients. Mean gestational age at first presentation was 22.12 weeks among Black-African patients and 17.61 weeks among Black-Caribbean patients, compared with 14.71 weeks among non-Black/other clinic patients. In pregnancy care contexts, late presentation compresses the window for screening, counselling, and referral and plausibly reflects structural vulnerabilities—insurance exclusion, legal precarity, cost barriers, unstable housing or income, transportation burden, documentation discontinuity, and fear of systems—rather than individual-level preferences(3, 19, 38).

The Black-African and Black-Caribbean subgroups differed in ways that matter for service design. Black-African patients were more likely to report being common-law or married, having post-secondary education, receiving prenatal care overseas, and presenting later in pregnancy. Black-Caribbean patients were more likely to report being single, having secondary education, living in extended-family or sibling households, having shorter transit times, and having no prior prenatal care. These differences support the decision not to collapse Black patients into one undifferentiated category.

Equity implications: why language is unlikely the primary driver

A particularly important equity finding was that interpreter requirement was low among Black patients but high among non-Black/other clinic patients, yet Black patients still presented later. This pattern weakens interpretations that attribute delayed access primarily to language barriers and instead supports structural interpretations more consistent with Canadian scholarship on anti-Black racism and obstetric racism (28–30). In other words, language accommodation alone is unlikely to be a sufficient intervention target for improving early prenatal entry in this population. Interpreter need is also an incomplete proxy for communication and access barriers because it does not capture mistrust, prior discrimination, fear of billing or immigration consequences, or unfamiliarity with health-system pathways.

The pattern of prior prenatal care coexisting with absent prenatal records suggests that inequities may operate not only through whether care was sought, but also through whether care could travel with the patient. In an uninsured and precariously documented context, missing documentation can slow risk assessment, duplicate testing, and delay appropriate referral. This mechanism is especially important because it identifies an avoidable administrative source of inequity rather than a patient-level deficit, particularly in an era where electronic communication or even simple cell phone pictures are easily available.

Anemia was nearly three times more frequent among Black patients than among non-Black/other clinic patients. This should not be interpreted as an intrinsic or biologically determined difference alone. Rather, it likely reflects upstream determinants such as delayed care, constrained access to routine monitoring, nutrition insecurity, and chronic stress that cluster under structural vulnerability (17, 29).

Systems relevance and integrated care

Within this clinic-attending cohort, the largest differences were concentrated before or at first presentation rather than in referral destination after clinic assessment. Once patients reached the clinic, pregnancy risk classification and referral destination were broadly similar across Black-African and Black-Caribbean subgroups. This suggests that the clinic may function as a partial equity buffer after entry into care, even if it cannot offset structural exclusion before entry.

A defining feature of this model was the integration of the clinic midwife across community and hospital settings. The clinic midwife worked within a community midwifery practice group and held hospital privileges, enabling direct referral pathways to ongoing care. This arrangement appears to have mattered in practice: patients could be assessed, stabilized, and navigated into ongoing prenatal care without defaulting to emergency department entry, and urgent emergency or labour-and-delivery referral and documented loss to follow-up were both uncommon. These patterns suggest that integrated community–hospital arrangements may reduce fragmentation and preserve escalation for people who genuinely require higher-acuity care (39, 40).

The value of this model may also lie in the distinctive midwifery skill set it mobilized. Midwives are particularly well placed to assess and manage early pregnancy complications such as bleeding and pregnancy loss in community settings, including supporting expectant management of early pregnancy loss when desired, while also identifying when urgent ectopic pregnancy needs to be excluded and arranging timely community ultrasound or hospital referral as appropriate. In many settings, providers without comparable perinatal-specific scope or referral relationships may need to divert such patients directly to hospital. In this clinic, the combination of perinatal-specific expertise, continuity capacity, and strong intra- and interprofessional relationships likely contributed to the low use of urgent services. In Toronto, as in many settings, the full scope of midwifery skill may be underused in comparable models of care. For such models to function effectively, however, midwives need clear hospital referral arrangements and working relationships that allow rapid diversion to the appropriate service when escalation is clinically required (35, 40–42).

Limitations

This single-site retrospective review cannot represent uninsured pregnant people who never reached the clinic or contexts where the immigration make up may be different. Income in particular was poorly reported, although this may reflect the conditions of precarity and should not be interpreted as merely missing data. The study did not measure patient-reported experiences of racism directly and did not include linked birth outcomes, limiting interpretation of downstream pregnancy and neonatal

consequences. Immigration status and insurance exclusion were inferred from clinic eligibility and charted variables rather than independently verified legal status.

Recommendations for service design and future research

Earlier access pathways are needed for uninsured pregnant people, including outreach, community referral routes, and clear messaging that prenatal assessment is available regardless of insurance status. Records-continuity supports such as navigation roles, portable prenatal summaries, proactive record retrieval, and administrative assistance may help reduce documentation discontinuity. Equity-oriented programming should also move beyond language interventions alone to address structural exclusion, fear of billing or immigration consequences, transportation costs, documentation barriers, and anti-Black racism.

Future programming should avoid one-size-fits-all “Black maternal health” models and instead tailor supports to migration pathway, settlement context, household structure, and prior-care location. Finally, the high referral rate, low lost-to-follow-up rate, and low urgent-service use observed in this clinic suggest that midwifery-led stabilization and referral models deserve further study. Similar models may make better use of the full scope of midwifery expertise—including management of early pregnancy bleeding and loss, triage, and close follow-up—but they are likely to work best when midwives have established hospital privileges, referral arrangements, or trusted working relationships that allow timely diversion into the correct service when needed.

Declarations

Competing Interests

The primary author was also the coordinating midwife for the walk-in clinic in the study. No data was collected or analyzed while patients were in care. No compensation was received for this work.

Author Contribution

MH - concept, initial data analysis, initial drafts
SR - Black maternal health expertise, data validation and analysis, revisions and final draft contribution

Data Availability

The datasets analysed during the current study are not publicly available because they contain sensitive clinical and sociodemographic information from medically uninsured and potentially precariously documented pregnant people. Because of the small and structurally vulnerable population, public release may create deductive disclosure risk. De-identified aggregate data may be available from the

corresponding author on reasonable request, subject to research ethics approval, institutional privacy requirements, and data-sharing agreements.

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Figures

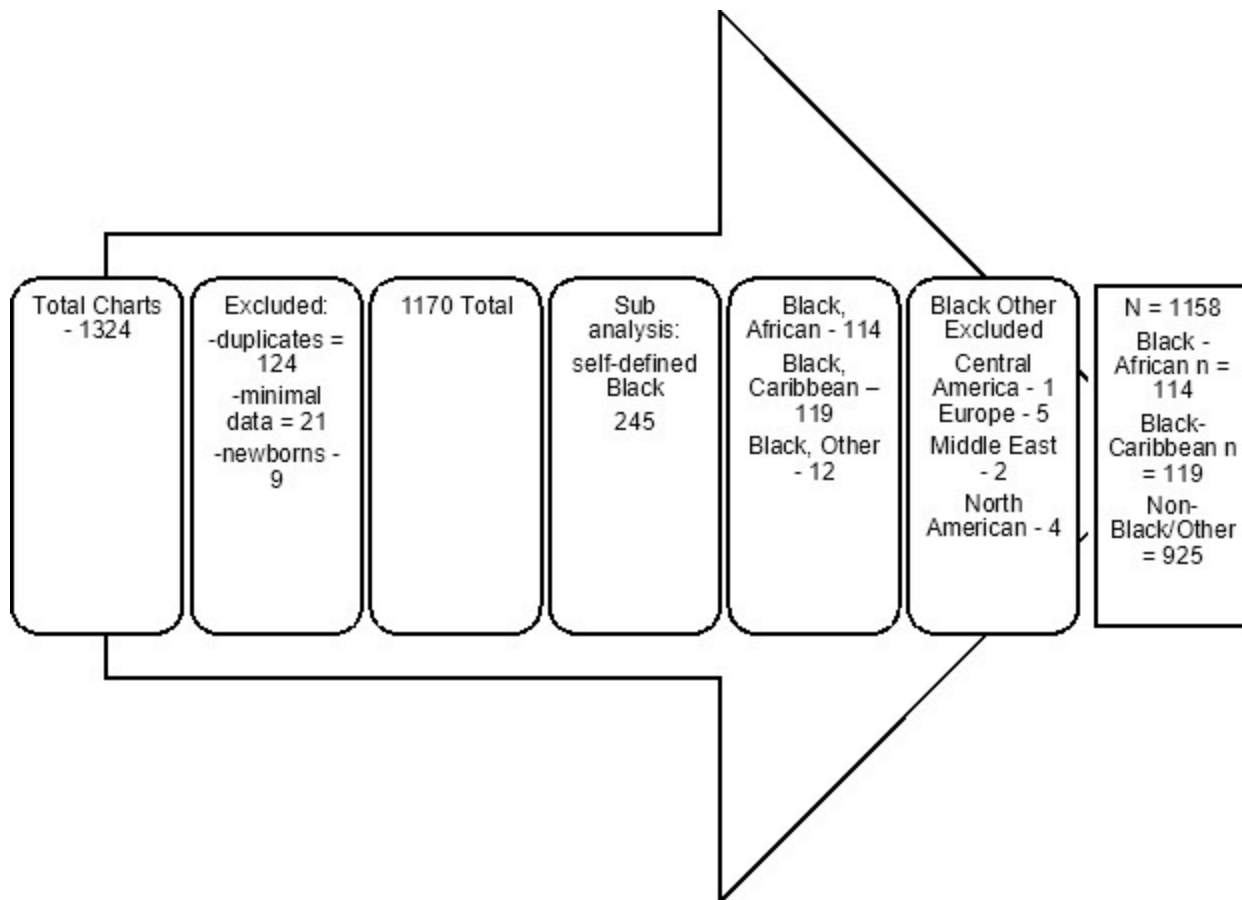


Figure 1

Participant flow chart