

Ethnic impact of NICE guideline on induction of labour at 41 weeks.

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1. Objective:

Assess impact on workflow with induction at 41 weeks and ethnic variation in outcomes for post-date pregnancies.

2. Method:

Retrospective review of all term births from 37-42+ weeks with a specific emphasis on ethnicity and post-date pregnancy. Data over 36 months (2018-2021) Data extraction from electronic maternity system Badgernet, of maternal demographics, mode of birth, induction vs spontaneous labour, caesarean rates.

Ethnicity number of women who had IOL
Out of 10749 women, 3759 were IOL over 2 years
(this is data excluding cat 4 c section)

	37 to 40 +6	41+0	41+1	41+2	41+3	41+4	41+5	41+6	41 weeks t otal	42+0	42+	Total of this ethnic group (N=%)
Any other ethnic group	122	2	9	3	2	2	0	5	23	3	0	148 (3.93%)
Black African	125	1	5	1	0	3	2	5	17	2	1	145 (3.86%)
Black Caribbe an	42	1	0	0	0	0	1	0	2	1	1	46 (1.22%)
Chinese	43	0	2	0	0	0	1	0	3	0	1	47 (1.25%)
Mixed other	100	2	1	1	2	1	3	2	12	1	1	115 (3.06%)
South Asian	498	12	8	5	2	3	4	8	42	3	3	546 (14.5%)
White	2214	60	54	57	38	54	72	84	428	49	21	2712 (72.15%)
Grand total of deliveries at this gestation (N=%)	3144 (83.64%)	87 (2.31%)	79 (2.10%)	67 (1.78%)	44 (1.17%)	63 (1.67%)	83 (2.20%)	104 (2.76%)	527 (14.01%)	60 (1.60%)	28 (0.74%)	3759 (100%)

3. Results:

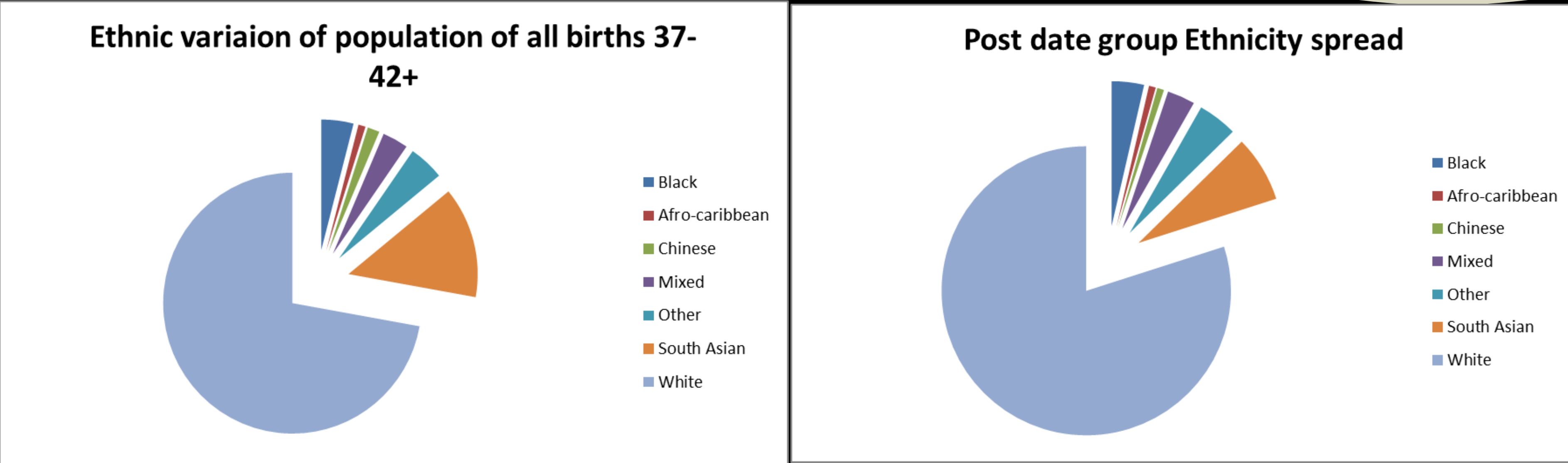
During the study period the hospitals had 10749 births at ≥ 37 weeks. The ethnic variation of the population of all births 37-42+ was 4% black, 0.9% Afro-Caribbean, 1.5% Chinese, 3.2% mixed, 4.4% other, 13.9% south Asian and 71.8% white.

In the post-date group there is a change in the ethnicity spread with the same groups represented 3.6% black, 0.76% Afro-Caribbean, 0.76% Chinese, 3.1% mixed, 4.4% other, 7.4% south Asian and 79.8% white.

Mode of birth also shows significant variation among ethnicities, induced labour leads to caesarean section rates of 50-55% among black and Afro-Caribbean compared to 28% among white ethnic populations.

Spontaneous labour also shows a differential outcome among various ethnicities in the post-date period (Afro-Caribbean at 42% and 19% in south Asian compared with 12% among white ethnicity) Certain ethnic minority groups also have lower % of pregnancies that continue beyond 41+ weeks ($<1\%$ Chinese and 7% south Asian compared to 14% white ethnicity).

Number of extra cases that will be offered induced if all are offered induction is 43 extra cases per month. If the ethnic minority group are offered induction at 40+1 weeks, then this will be an additional 23 cases per month and reduce the inductions at 41+0 to 20 cases.



4. Conclusion:

The data reflects outcomes in a multi-ethnic population with varying levels of socioeconomic deprivation.

The NICE guidance of Induction offer at 41 weeks in our population will result in an extra 43 inductions per month. **But outpatient inductions can reduce the burden of the workload. Each unit will have to analyse its own data before embarking on a blanket change in policy without workload assessment.**

It also shows that most Asian, Chinese, black and Afro-Caribbean women have delivered by 40+6 weeks of pregnancy lending credence to the hypothesis that this group have a different duration of gestation.

If the ethnic minority groups alone were offered induction at 40+1 weeks to reduce the risk of stillbirth this will translate to additional 23 inductions per month.

The number of inductions/interventions may be justified in this group to reduce their risk of postdate stillbirth.