

Intergenerational Ethnicity: Evidence for London from the 2001 Census

BSPS
6 July 2005

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Outline

- **Aims of Study**
- **Data Source**
- **Data Issues**
- **Results**
- **Implementation in Modelling**

Aims

- **Improve GLA London borough Ethnic Group Population Projections**
 - 1991 Census problems with high numbers of children in ‘Other’ Groups where the parents:
 - (1) had preferred to write in child’s ethnicity as Black British, etc, or,
 - (2) were themselves of different ethnic groups
 - 2001 Census partly allowed for this in more ethnic groups including Mixed categories
 - therefore a need/ability to improve fertility part of model
 - data can also give a direct indication of shapes of ethnic fertility rate schedules
- **Investigate ethnic differentials in partnerships and lone mothers**

Data

- **2001 Census Commissioned Table**
- **Universe**
 - Infants (ie persons aged 0) in private households with mother present
- **Variables**
 - Ethnicity of Infant
 - Ethnicity and Age of Mother
 - Ethnicity of Father (inc. not present/unknown)
- **Geography**
 - Greater London and 3 borough groups
- **Categories**
 - 16 Ethnic Groups
 - Mothers' Ages <20, 20-24, 25-29, 30-34, 35-39, 40+

Data Issues (1)

- **Disclosure Control**
 - Had originally requested data at borough level
 - Compromised to London and 3 borough groups
- **Number of Cases**
 - Births in London in year before Census: **104,160**
 - Age 0 in MYE: 97,137
 - Age 0 in Census: 95,970
 - of which in private households: 95,714
 - Age 0 in Commissioned Table: **87,406** (91%)
 - of which only **66,597** have father present (76%)
- **What happened to the other 8,308 infants?**

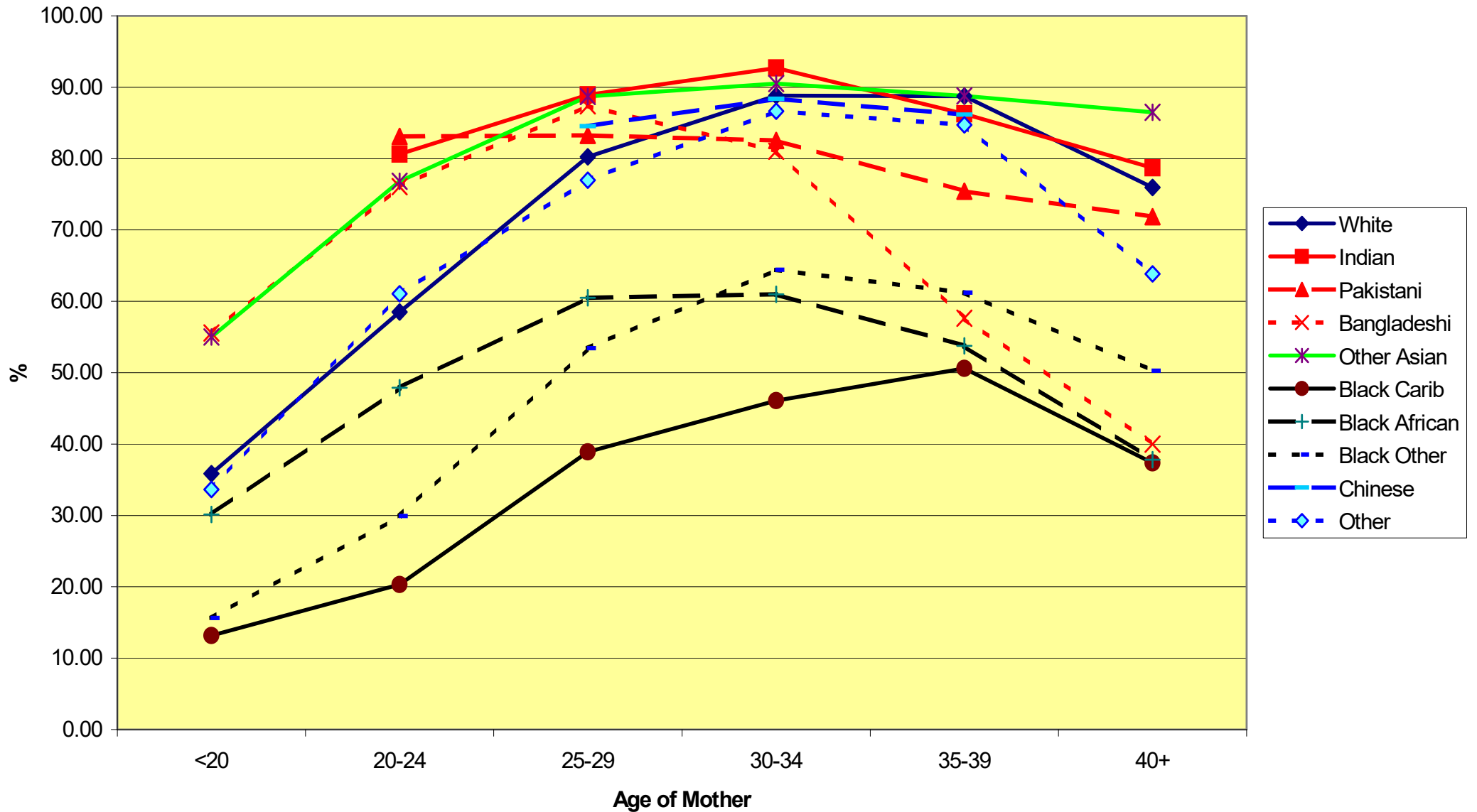
Data Issues (2)

- **Number of cells in each area**
 - 16 EG (plus unknown for father) for three individuals and 6 age-groups of mother = **26,112** cells
- **However, already decided to reduce EG to 10 for GLA projections (White, Indian, Pakistani, Bangladeshi, Other Asian, Black Caribbean, Black African, Black Other, Chinese, Other)**
 - Three 'White' groups combined
 - Four 'Mixed' groups absorbed into the three 'Other' Groups
- **Reduces number of cells to **6,600** per area**

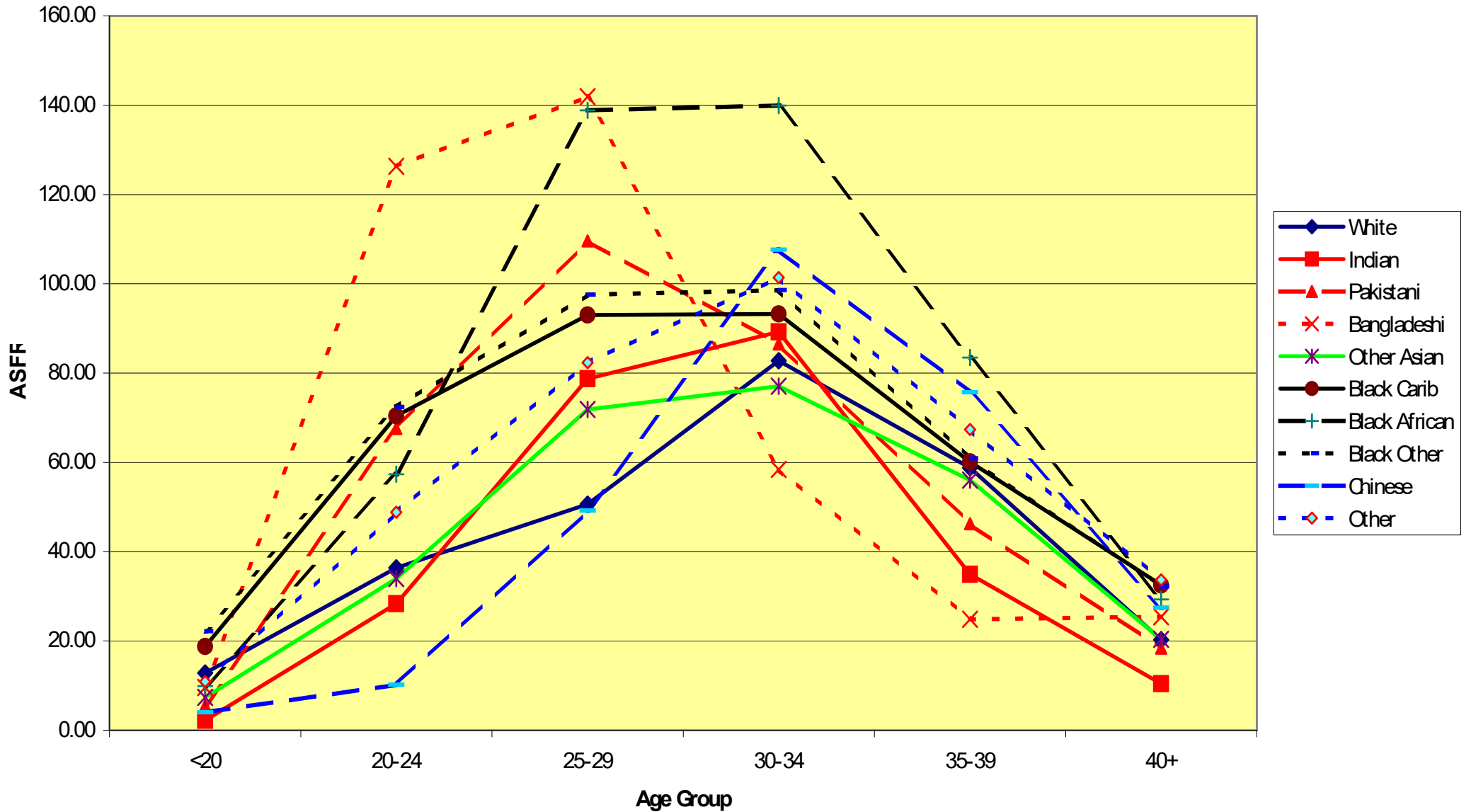
Some Peripheral Results

- **Mothers living alone**
- **Age-specific 'fertility' rates**

Father Present by Mother's Age and Ethnicity



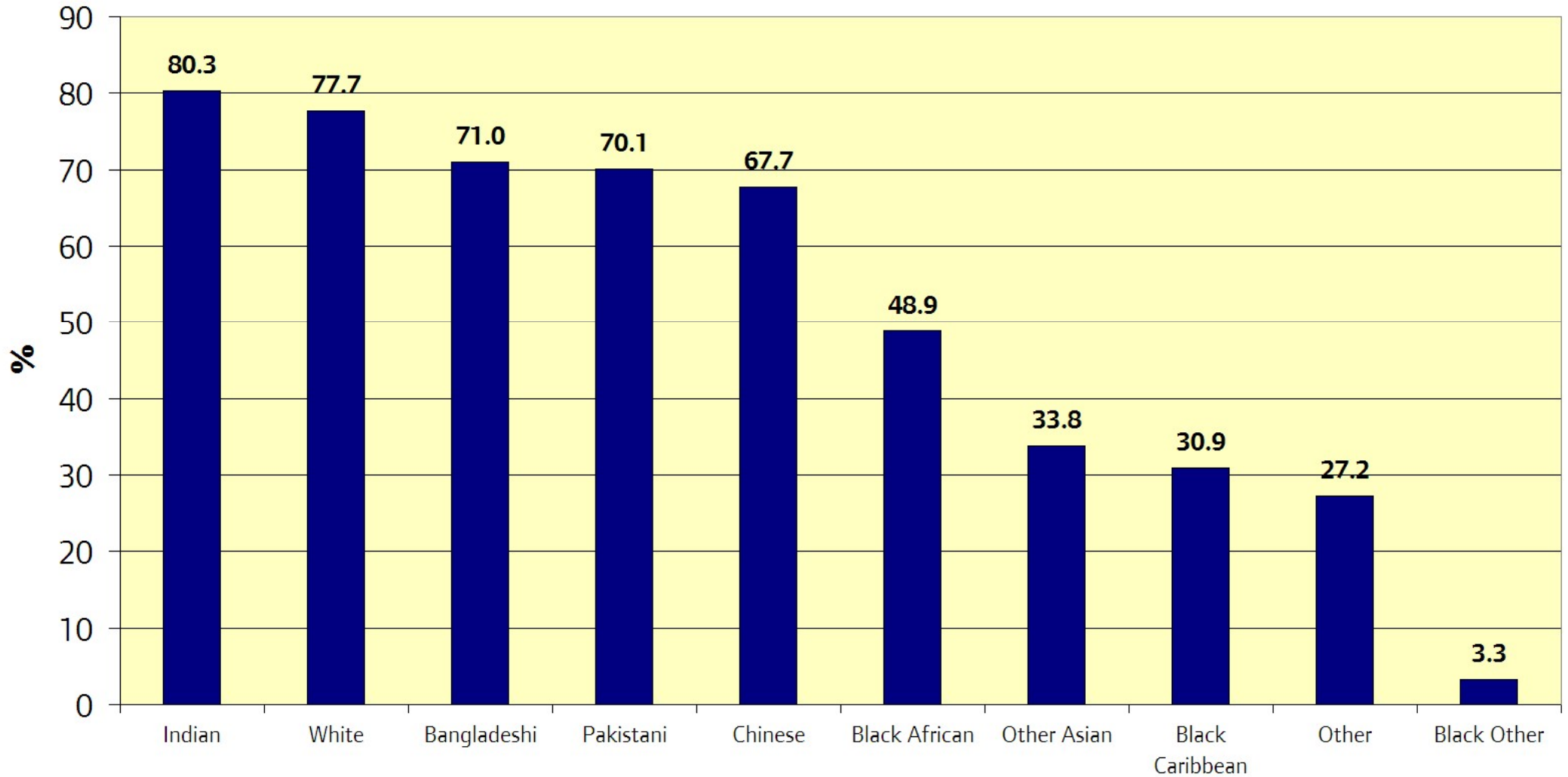
Age Specific 'Fertility' Rates



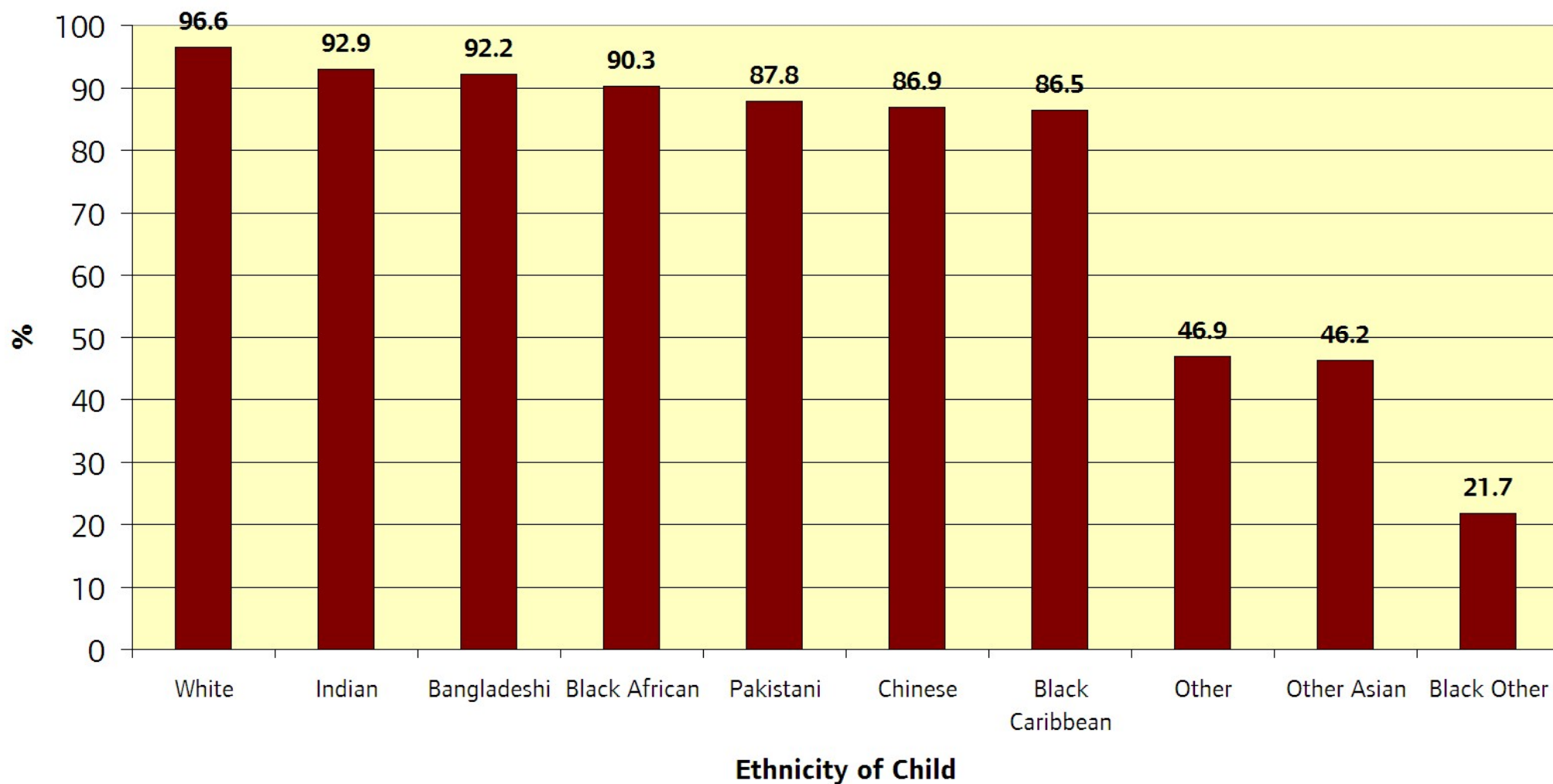
Main Results for London

- **Father, Mother and Child**
 - Same or different ethnicity
- **Where father's ethnicity not known or father not present**
- **Probability of female having a child with a different ethnic group**

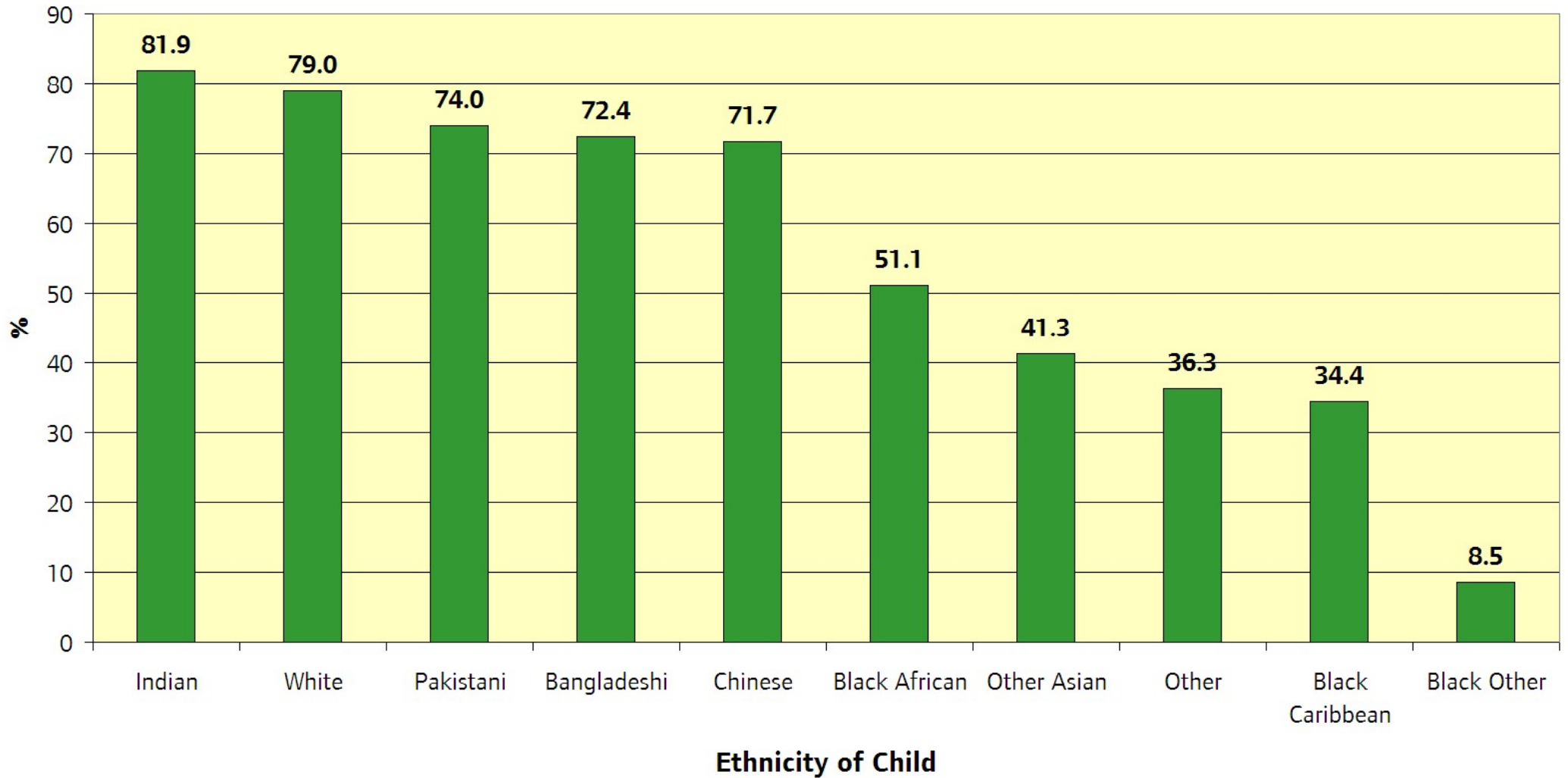
Mother, Father and Child have the same ethnicity



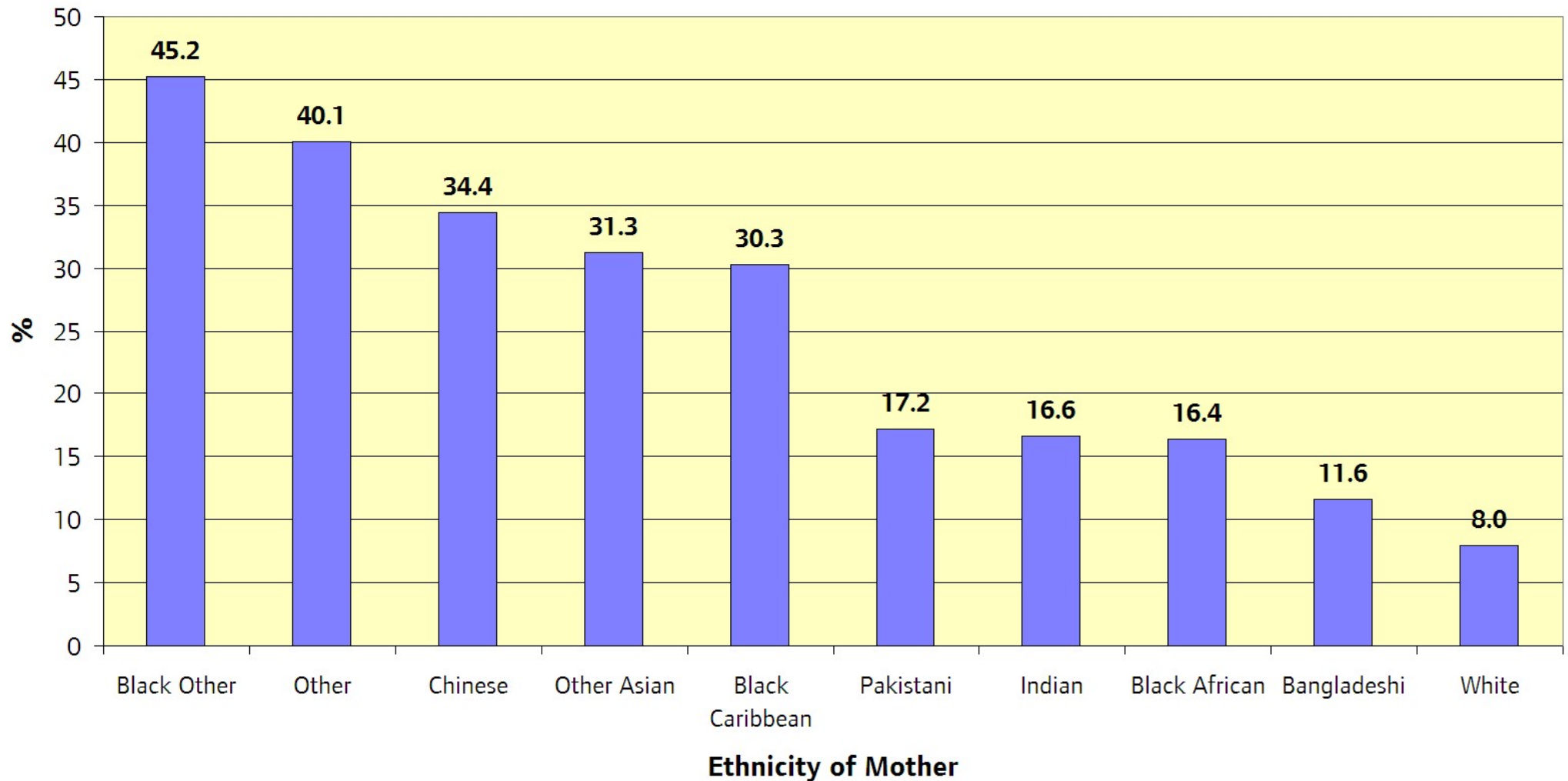
Mother and Child have same ethnicity



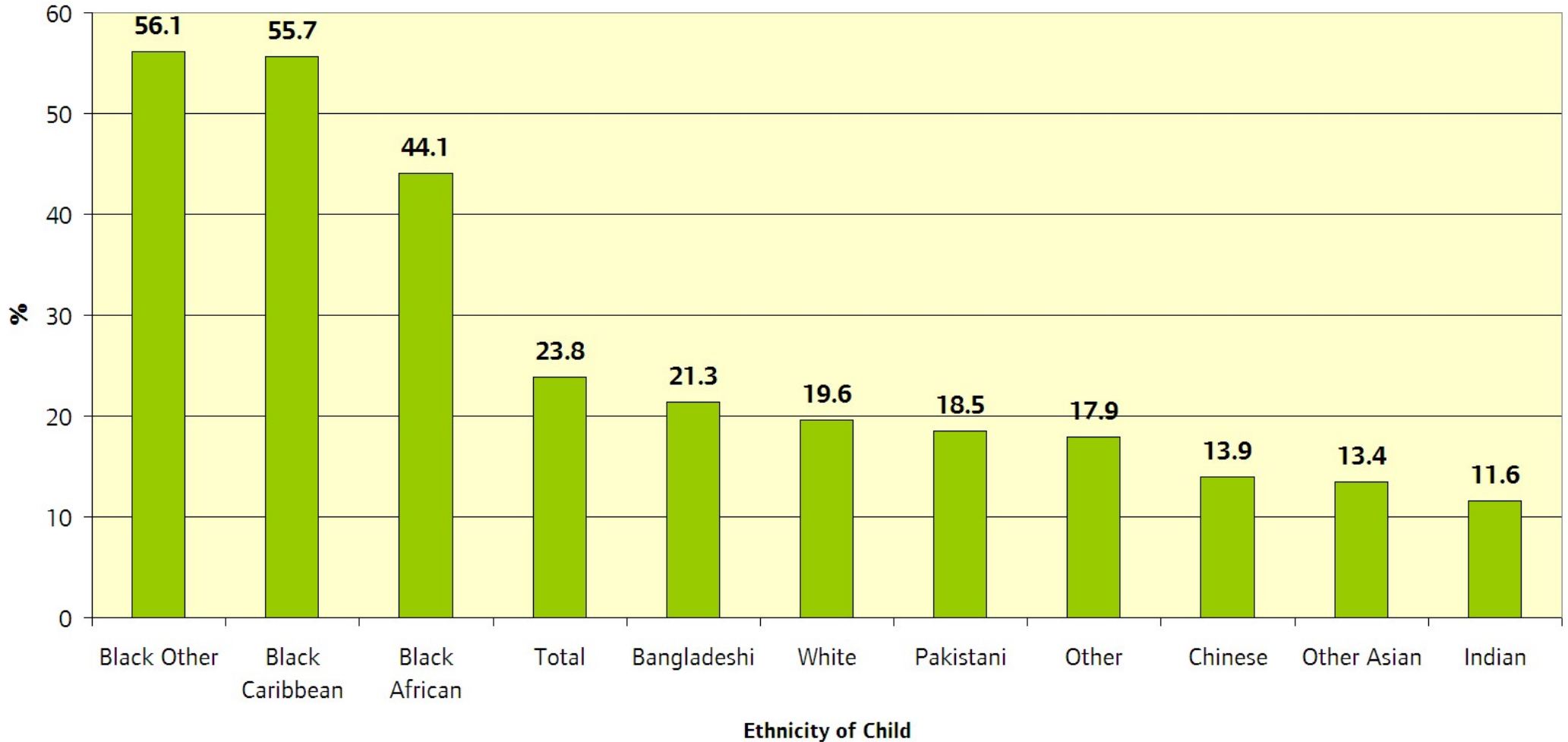
Father and Child have same ethnicity



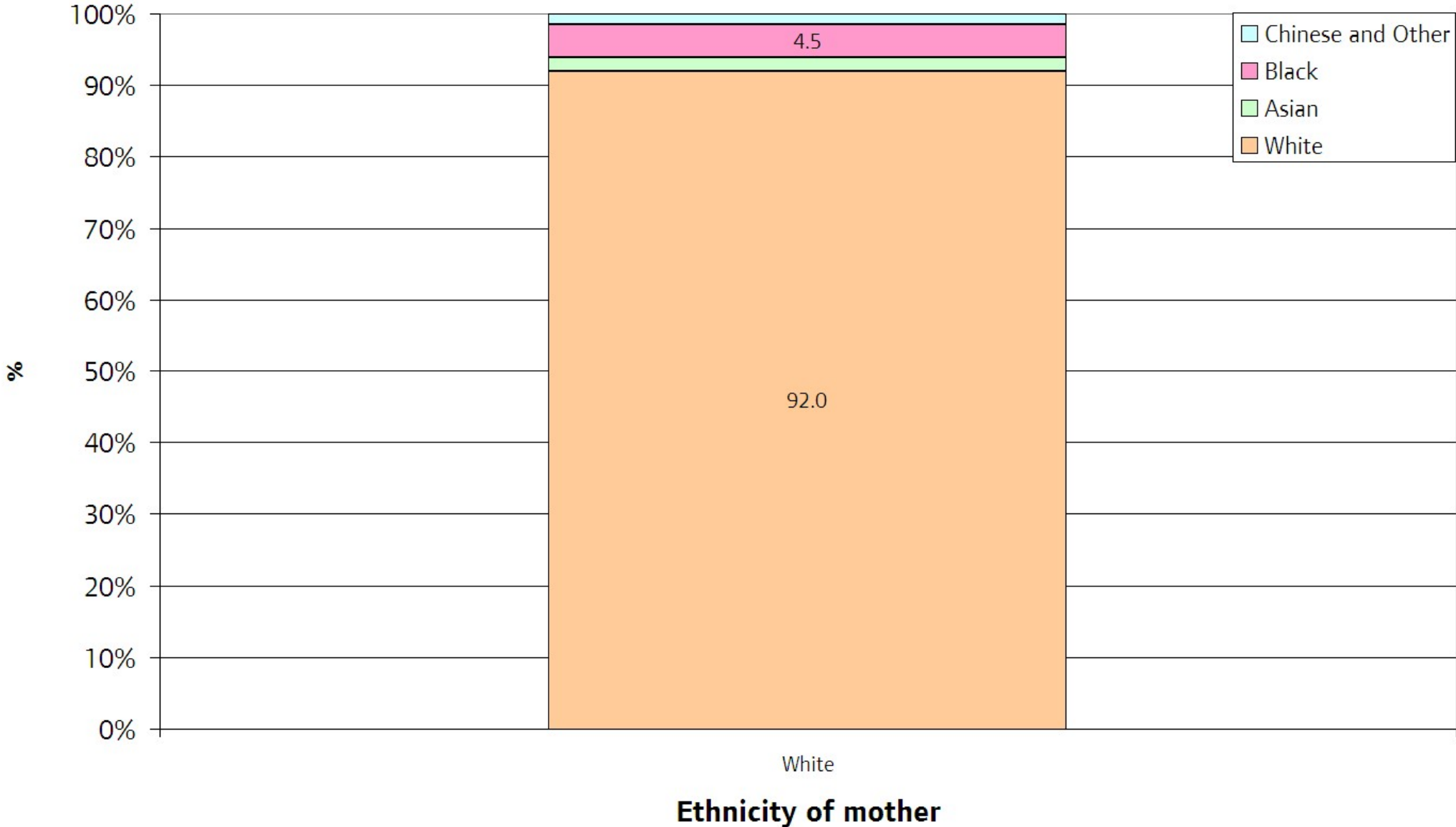
Mother and Child with different ethnicity



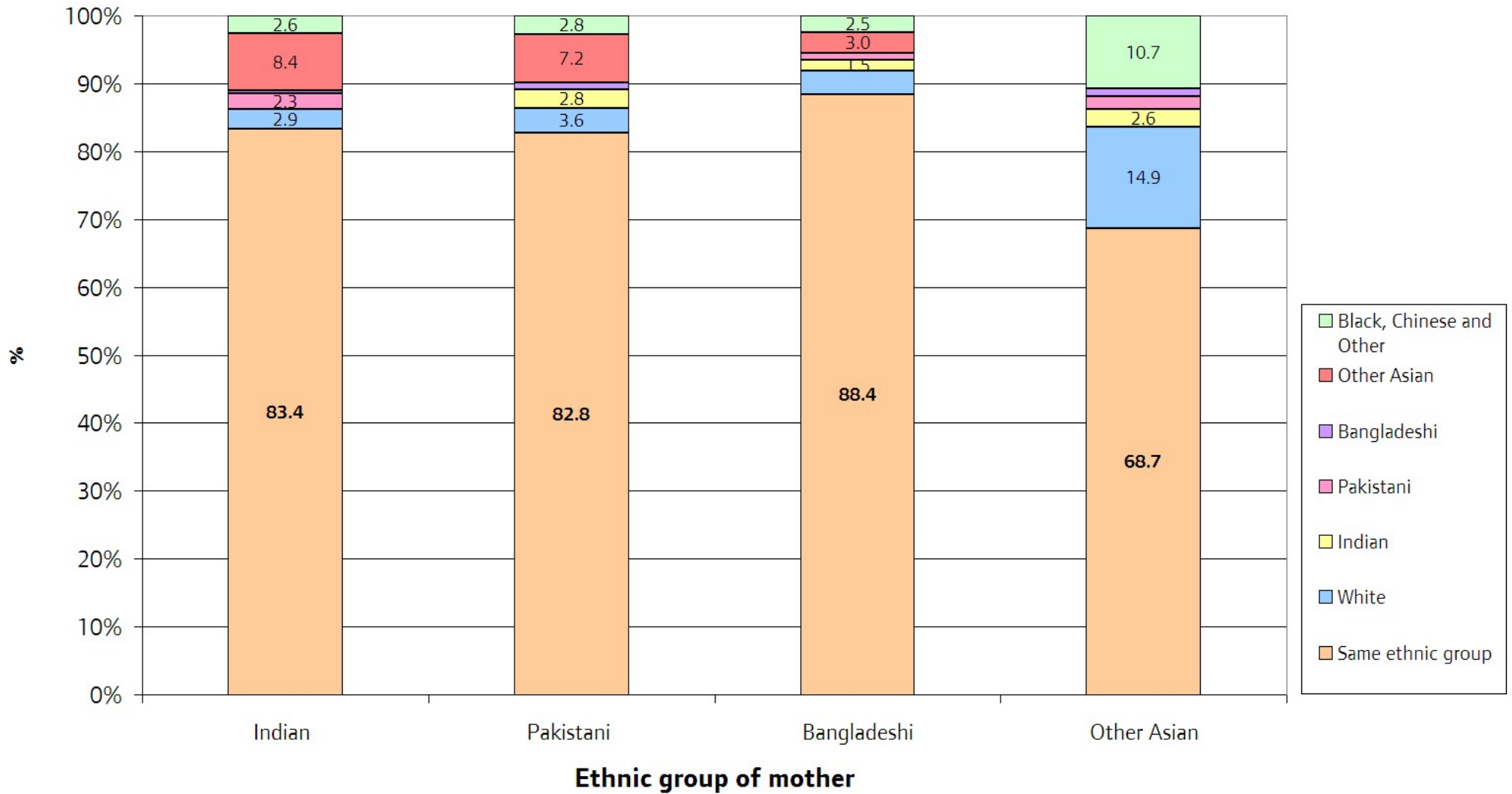
Proportion of all births where Father not present/ethnicity known



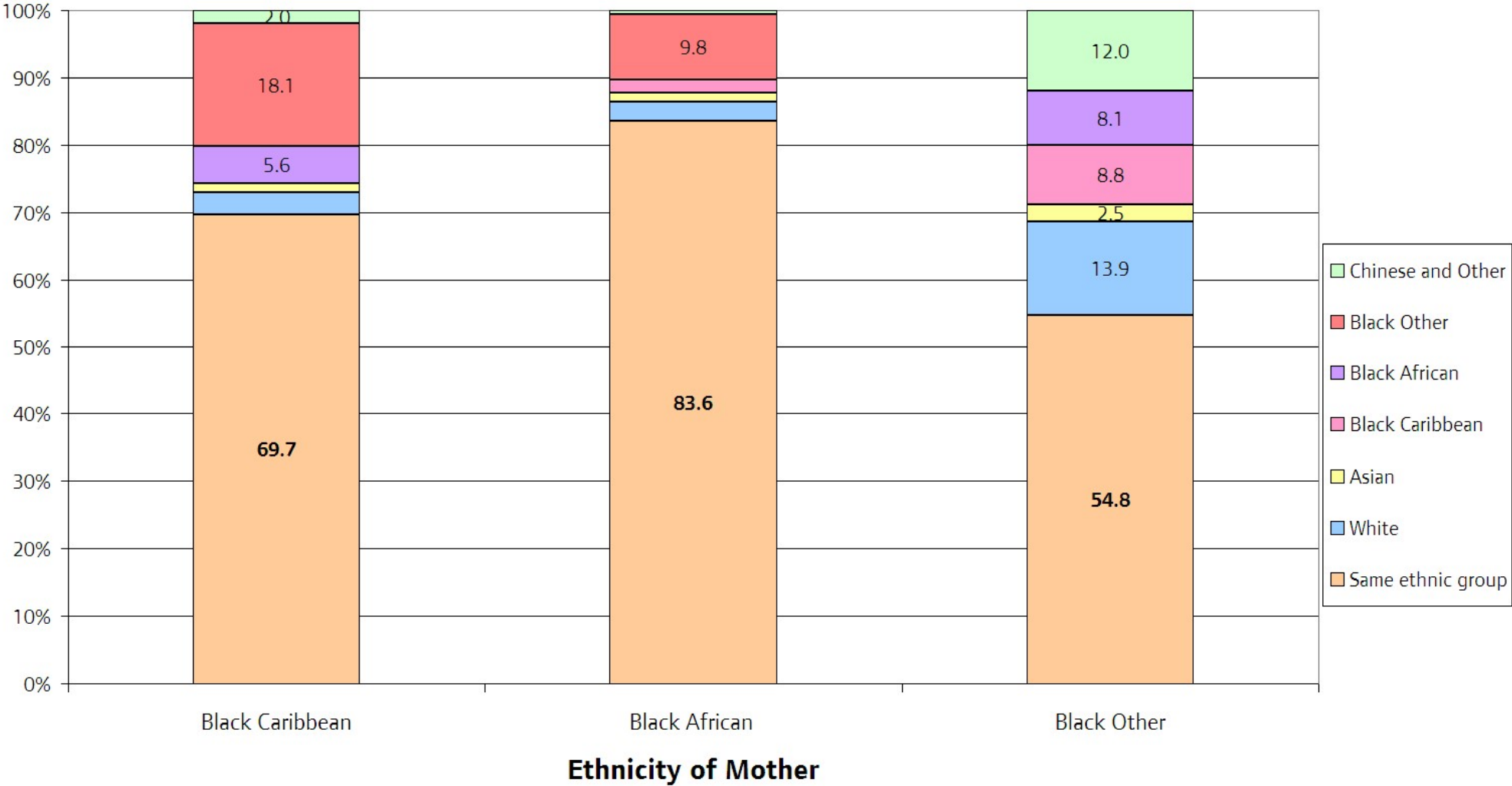
White Women and the ethnicity of their children



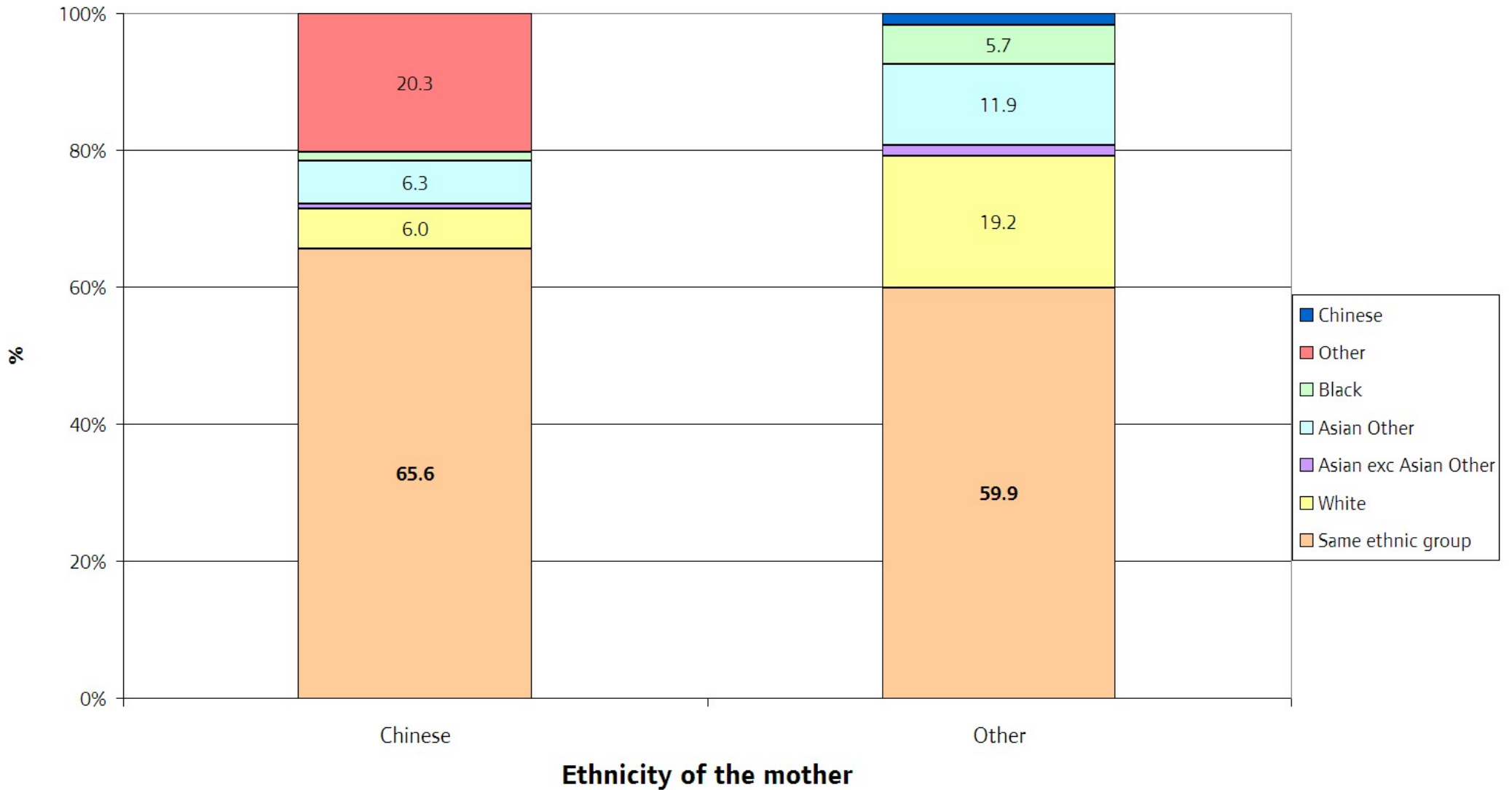
Asian Women and the ethnicity of their children



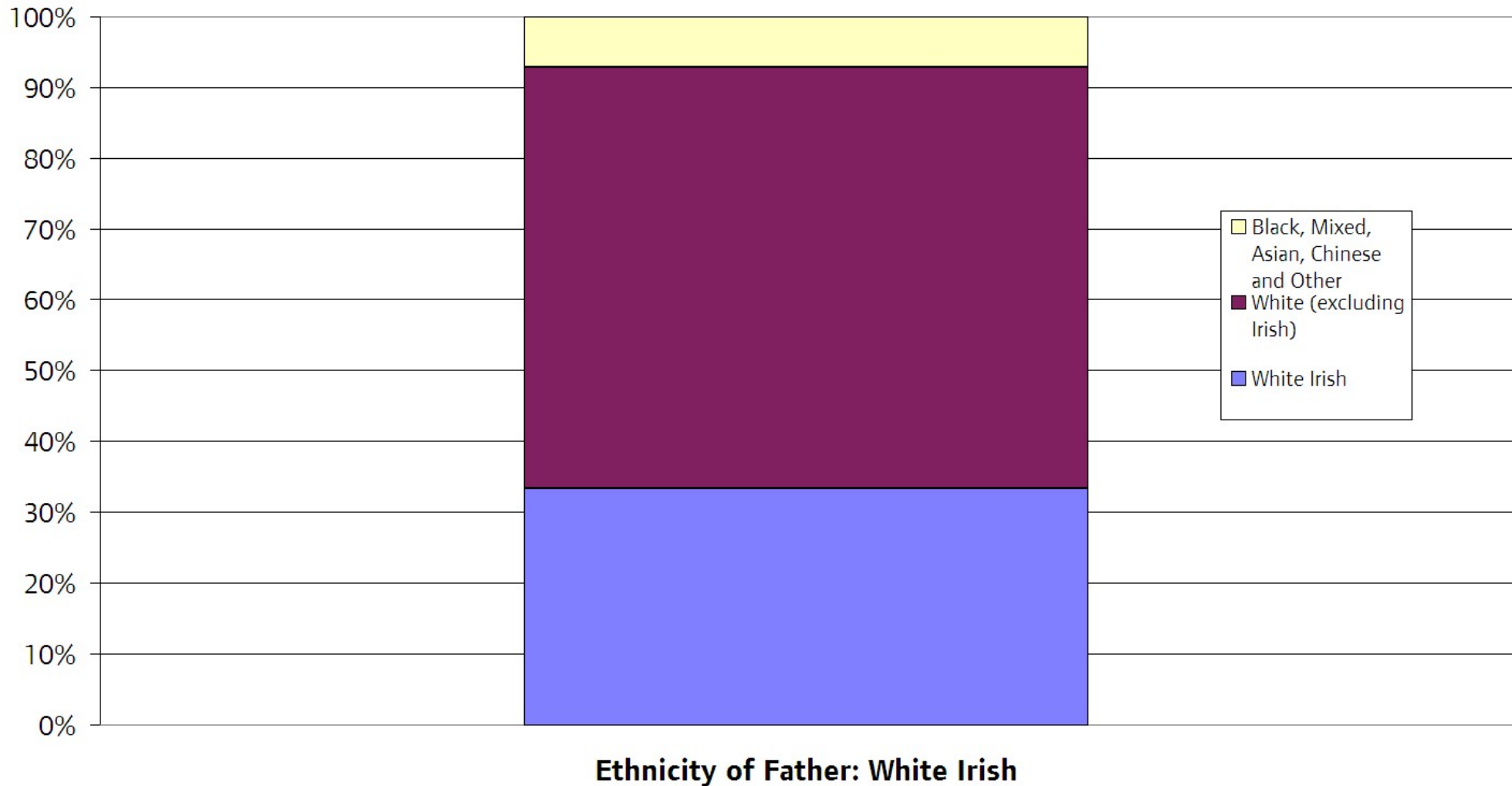
Black Women and the ethnicity of their children



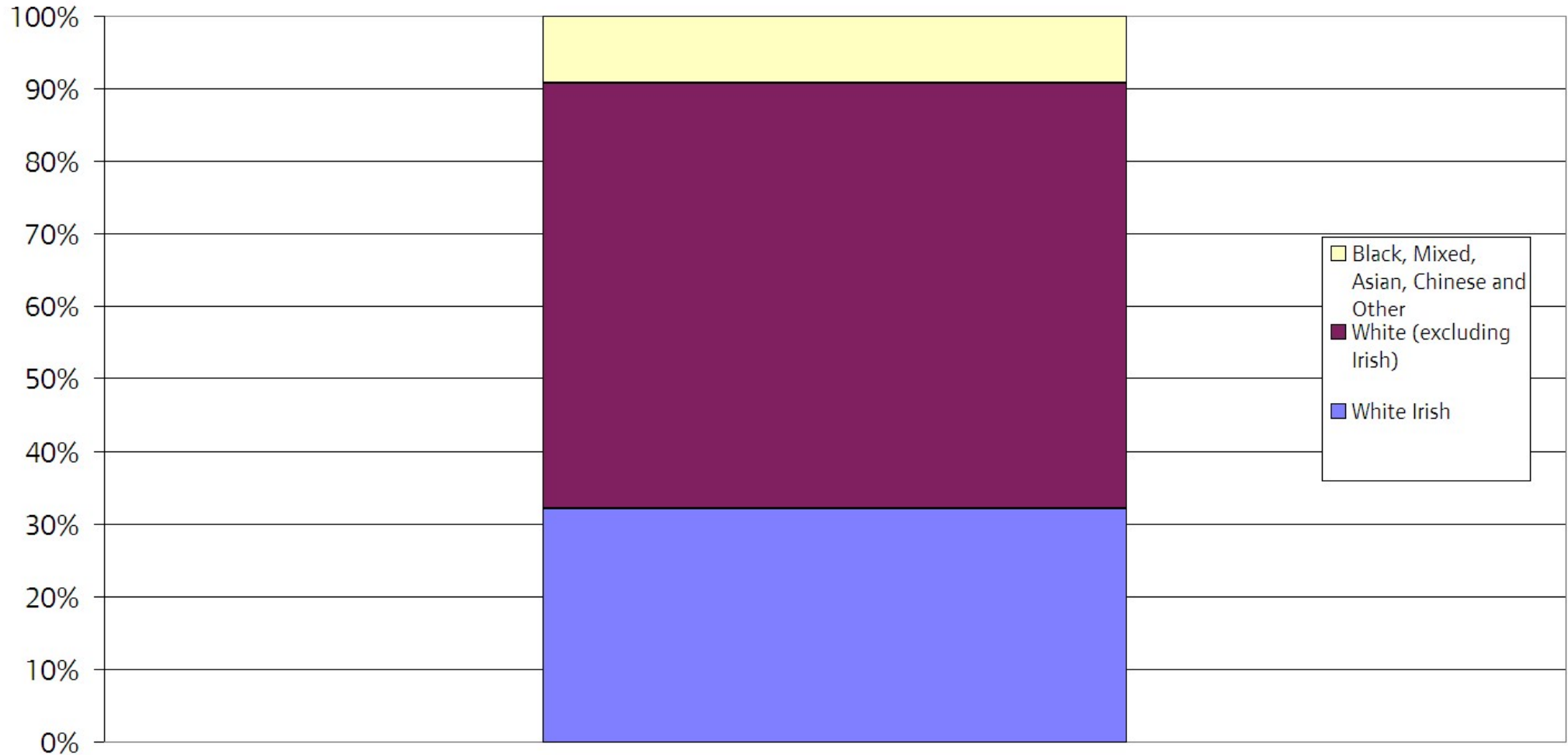
Chinese and Other Women and the ethnicity of their children



Ethnic Group of Baby with a father whose ethnic group is White Irish

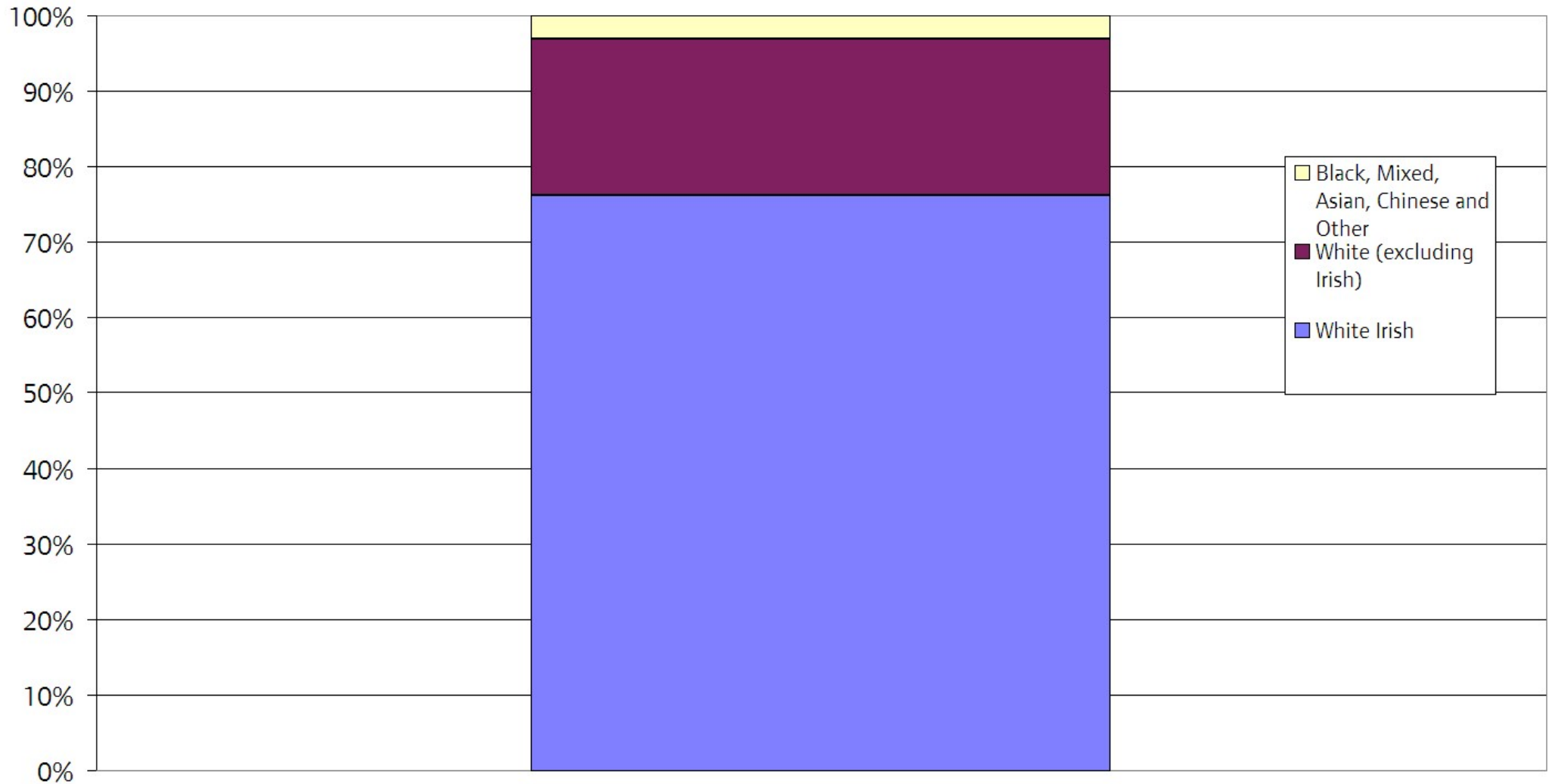


Ethnic Group of Baby who has a mother with ethnic group White Irish



Ethnicity of Mother: White Irish

Ethnic group of mother of White Irish Babies



Ethnicity of Baby: White Irish

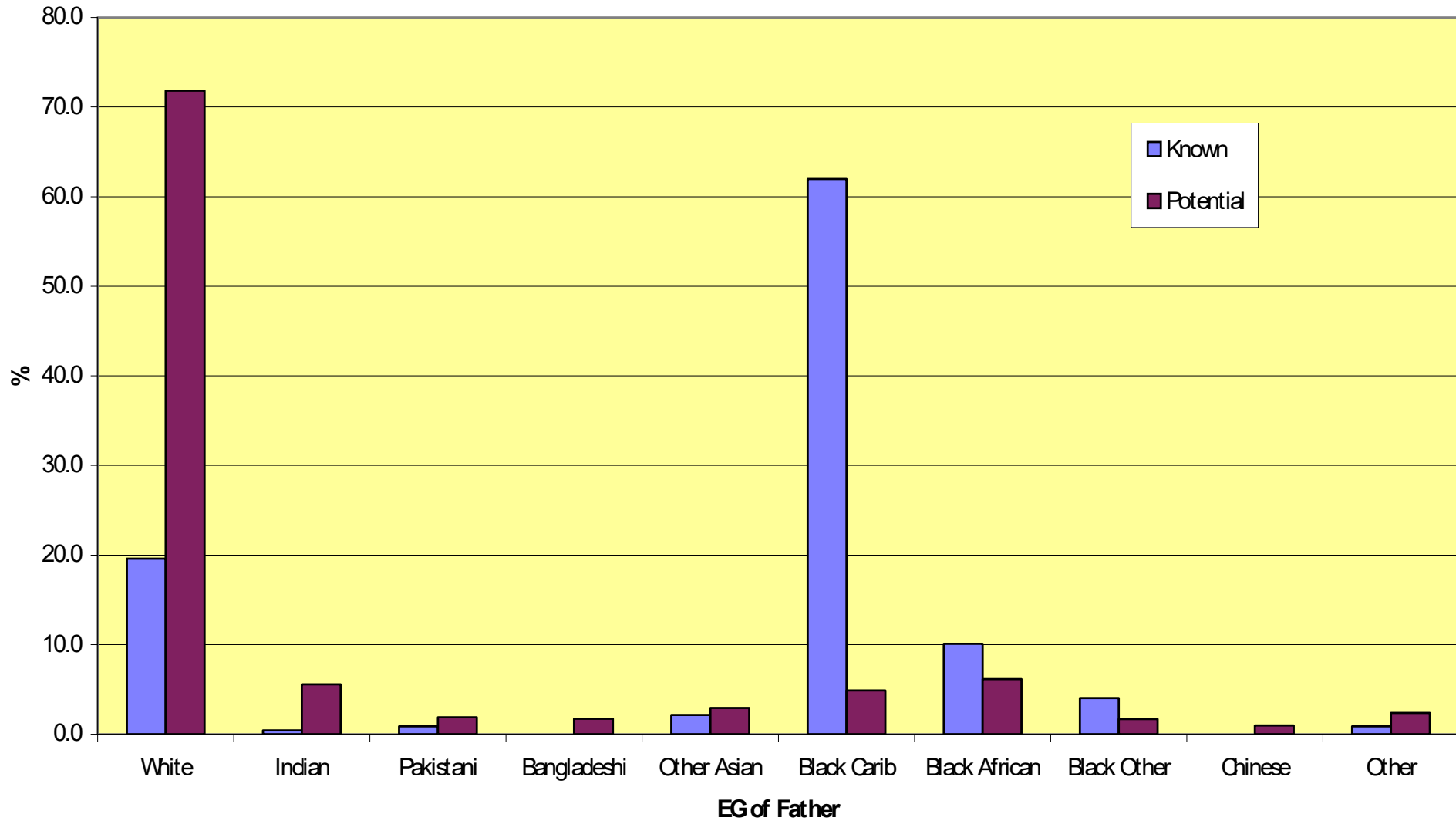
Modelling Problem

- **Creation of a borough level probabilistic model**
- **Using Borough Group Data**
- **Probability of woman (age x) in EG A having a partner in EG A, B, C, etc**
- **Probability of resulting child being in a particular group**

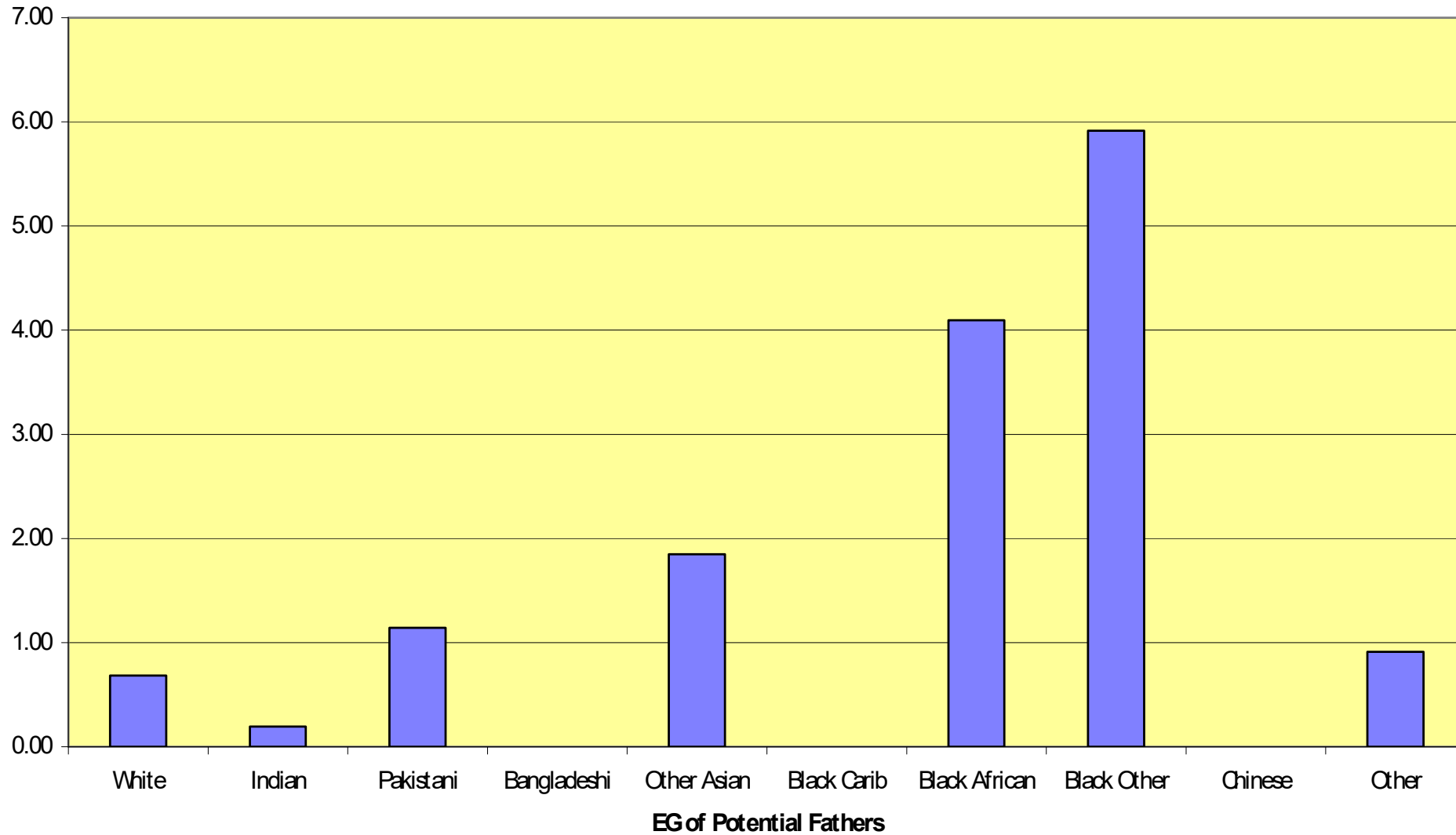
Black Caribbean Mothers aged 30-34

- **Births: 1325**
 - 925 Black Caribbean, 246 Black Other
- **Known Fathers: 694**
 - 430 Black Caribbean (62.0%), 136 White (19.6%)
- **Unknown Fathers: 631**
- Assume **Potential Fathers** are all males aged 30-39 resident in same area (ie London)
- Assume Unknown Fathers have same EG as Known

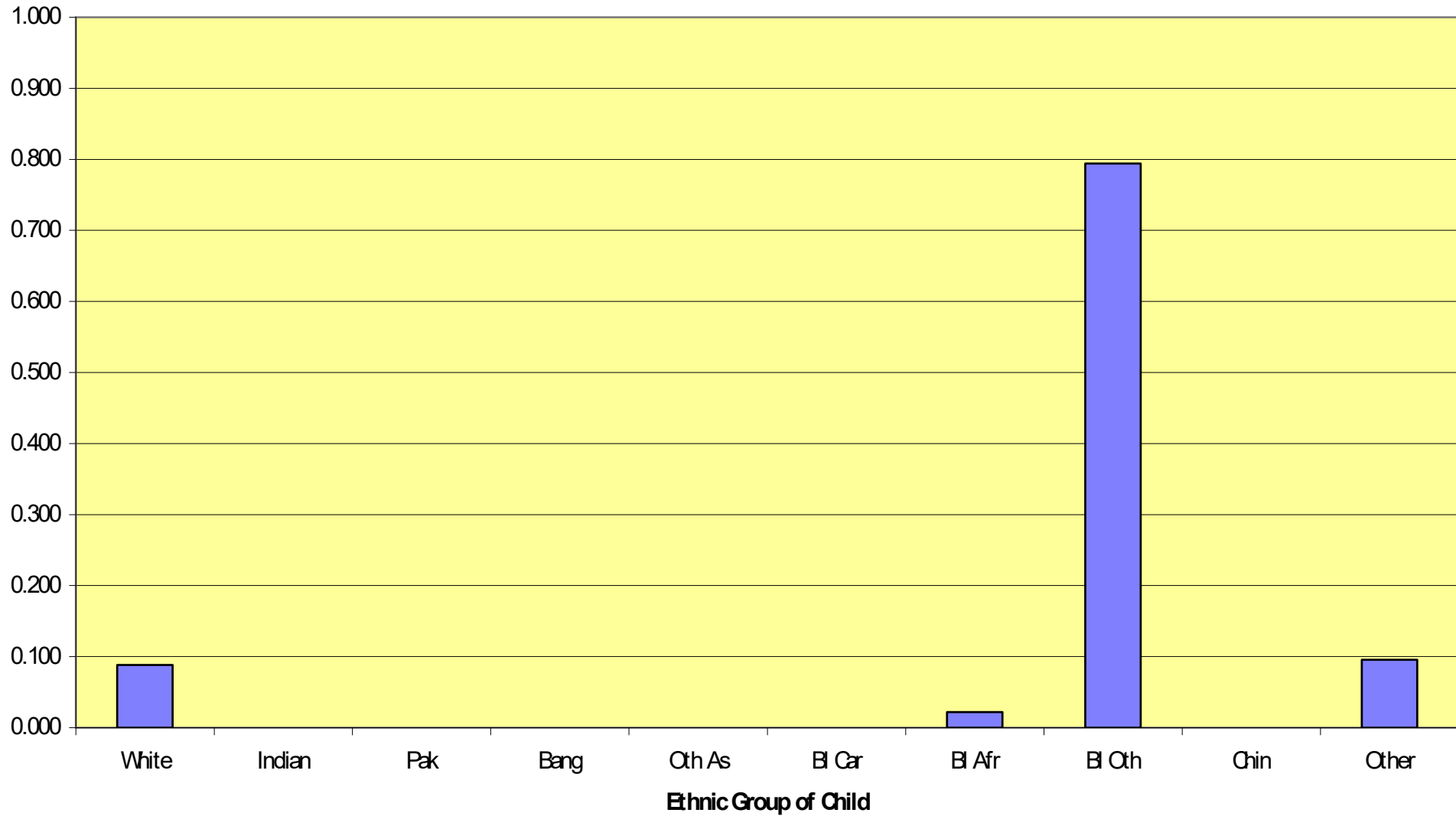
EG of Known Fathers and Potential Fathers (Black Caribbean Women aged 30-34)



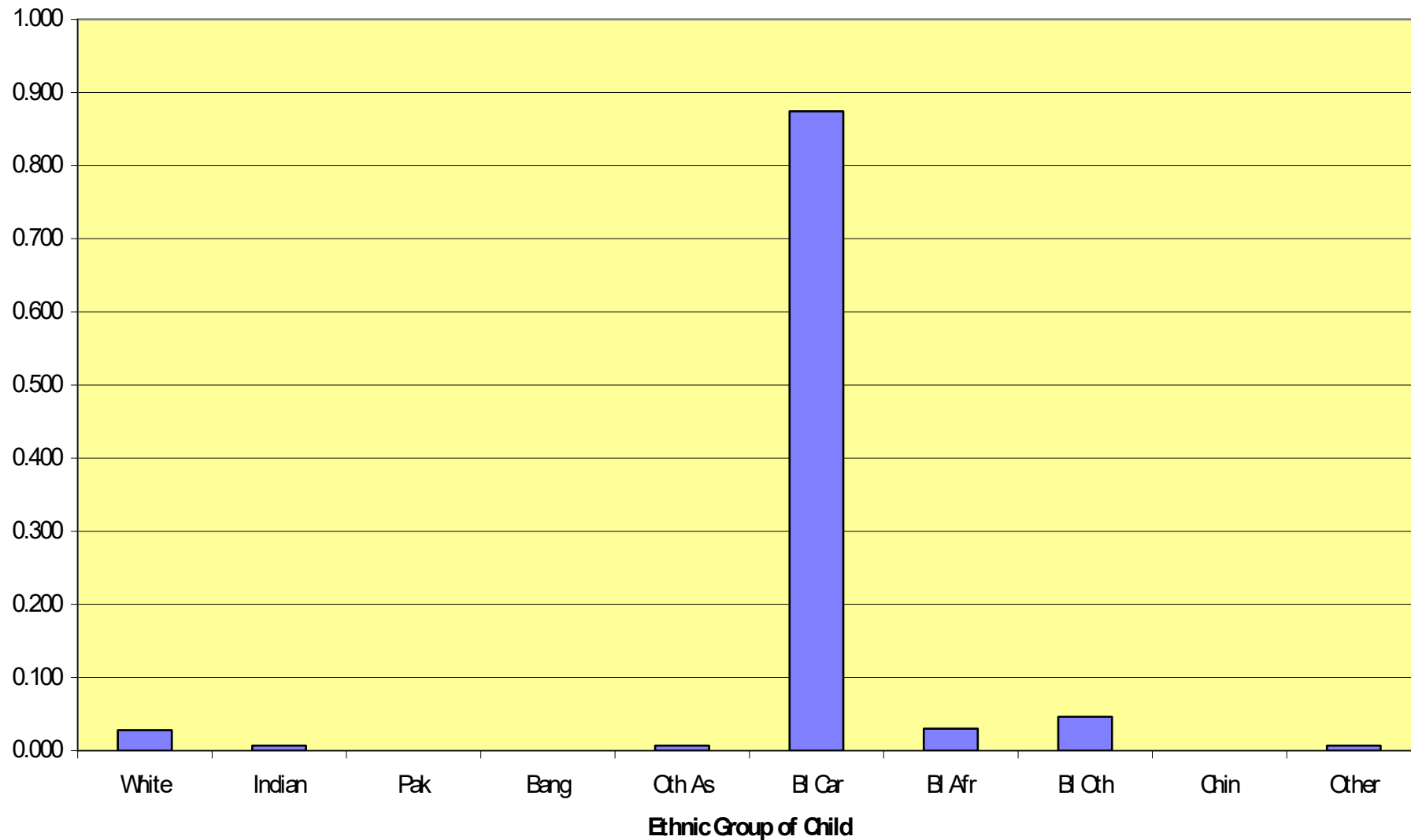
Odds Ratios by EG of Potential Fathers (Black Caribbean Women aged 30-34)



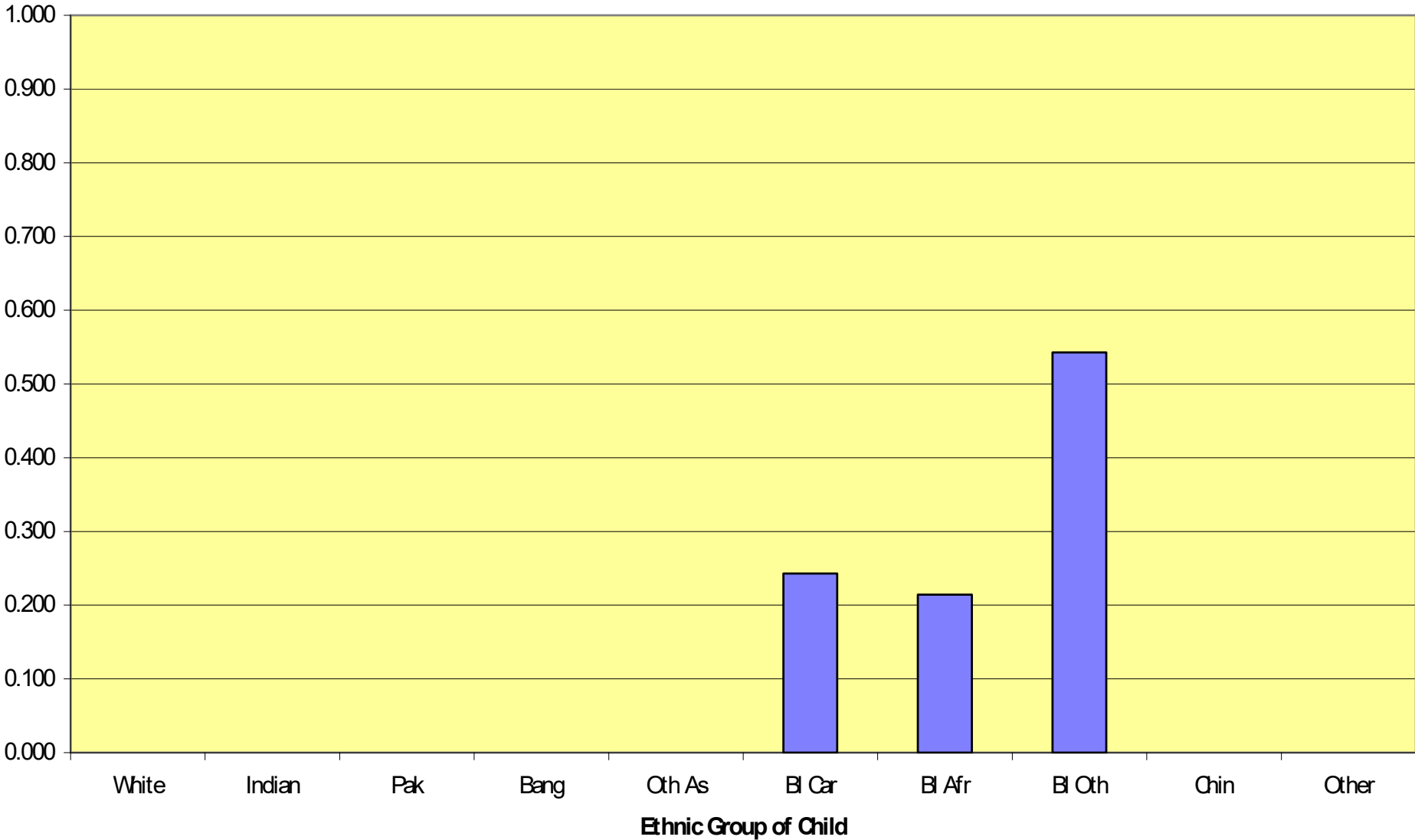
Probability of EG of Child given White Father and Black Caribbean Mother aged 30-34



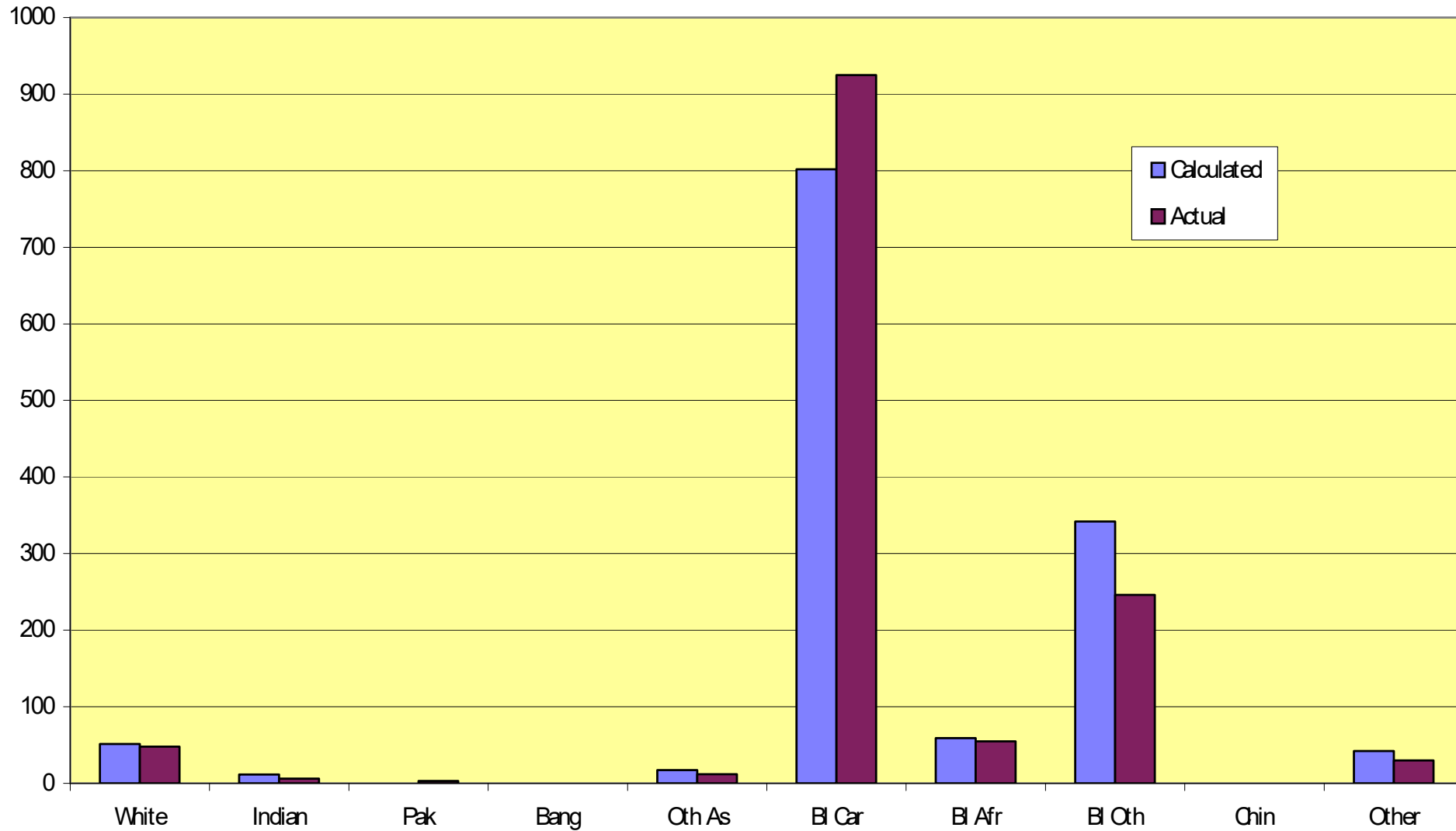
Probability of EG of Child given Black Caribbean Father and Black Caribbean Mother aged 30-34



Probability of EG of Child given Black African Father and Black Caribbean Mother aged 30-34



Calculated and Actual Births Compared: Black Caribbean Mothers Aged 30-34



Results

- **Using these probabilities and odds ratios one can attempt to forecast the EG of all children born to a particular group of women by EG and age**
 - Initial results tend to switch some Black Caribbean infants to Black Other – implies that the unknown fathers were even more likely to have been Black Caribbean
- **Do we assume that only the EG distribution of the Potential Fathers will vary according to Borough of Residence?**
 - This assumes that the odds ratios of forming a partnership are fixed, as are the likely EGs of the children
- **Next step is to test with Borough Group data**

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But you need to register for Demography