Inequalities in disability free life expectancy and healthy life expectancy between ethnic groups in England and Wales in 2001

Pia Wohland[1], Phil Rees[2] and Carol Jagger[1]

[1]Institute for Ageing and Health, Newcastle University; [2]School of Geography, University of Leeds

InHALE -
Inequalities in Healthy Active Life Expectancy: the role of time, place, person and methods
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Overview

- Research question
- Methods and Data
- Results
- Conclusions
- Outlook

Research question

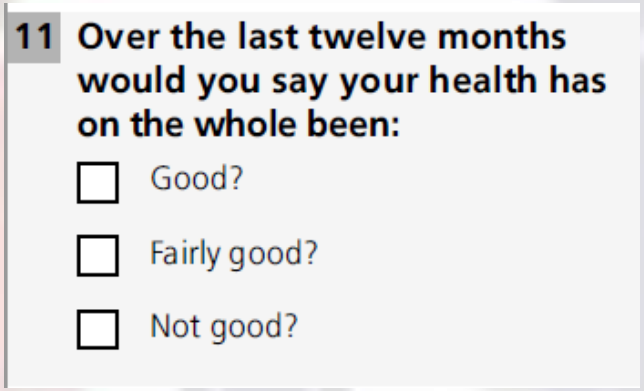
- How do health expectancies vary for ethnic groups in England and Wales and are the observed differences significant?

Method

- Two health expectancies
  - disability free life expectancy (DFLE) and
  - healthy life expectancy (HLE)
- **Sullivan method**
- need of information: mortality to calculate a standard life table and
- prevalence rate of health variable in the population disaggregated by gender and age

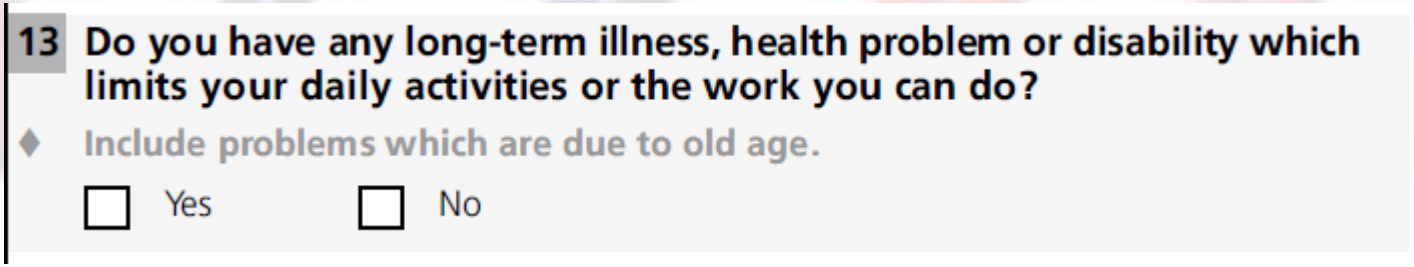
Data

- Mortality estimates for ethnic groups in England and Wales (Rees *et al.* 2009)
- Health data, commissioned table M203, M204 and M204a from Census 2001, ONS for ethnic groups by age and gender



11 **Over the last twelve months would you say your health has on the whole been:**

- ☐ Good?
- ☐ Fairly good?
- ☐ Not good?



13 **Do you have any long-term illness, health problem or disability which limits your daily activities or the work you can do?**

♦ Include problems which are due to old age.

☐ Yes ☐ No

Data

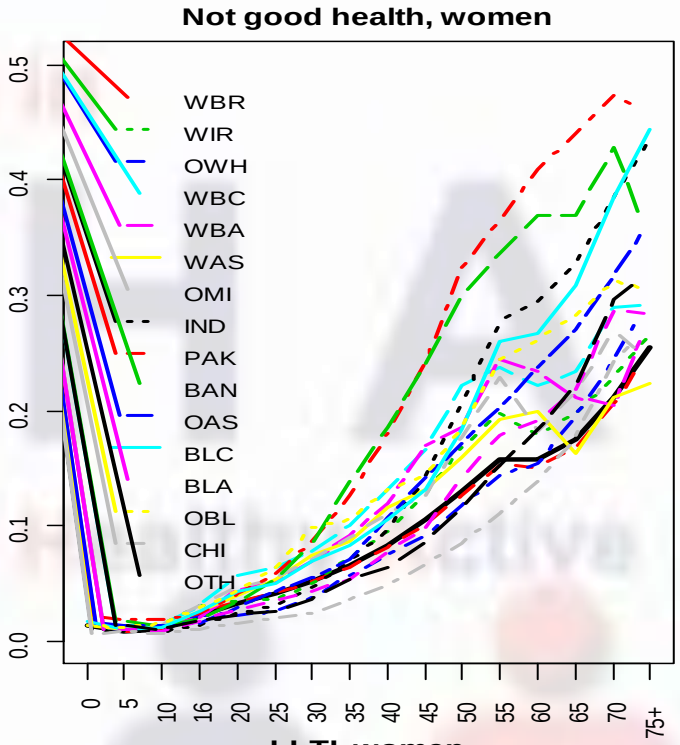
- Disability-free life expectancy (DFLE) is an estimation of length of time that an individual can expect to live free from a limiting long standing illness or disability
- Healthy life expectancy (HLE) the length of time an individual can expect to live in very good or fairly good health

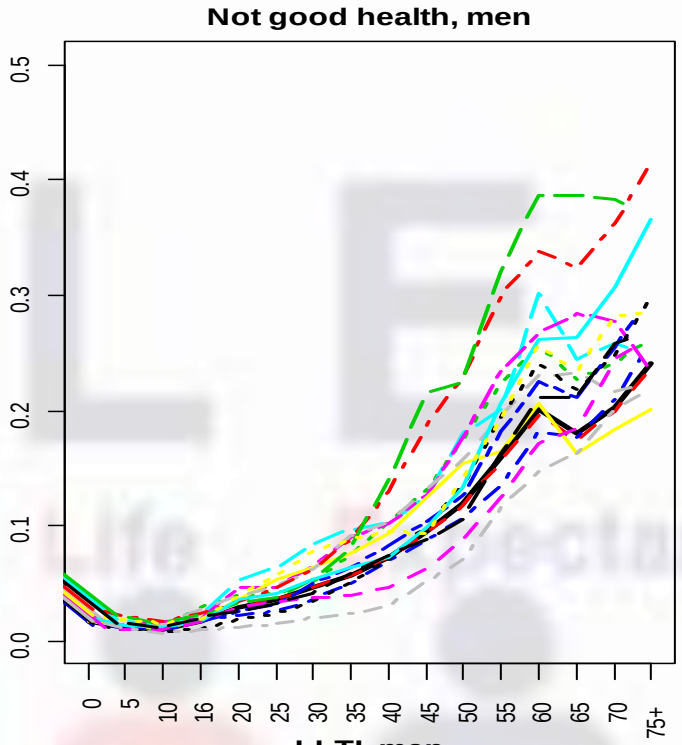
Data

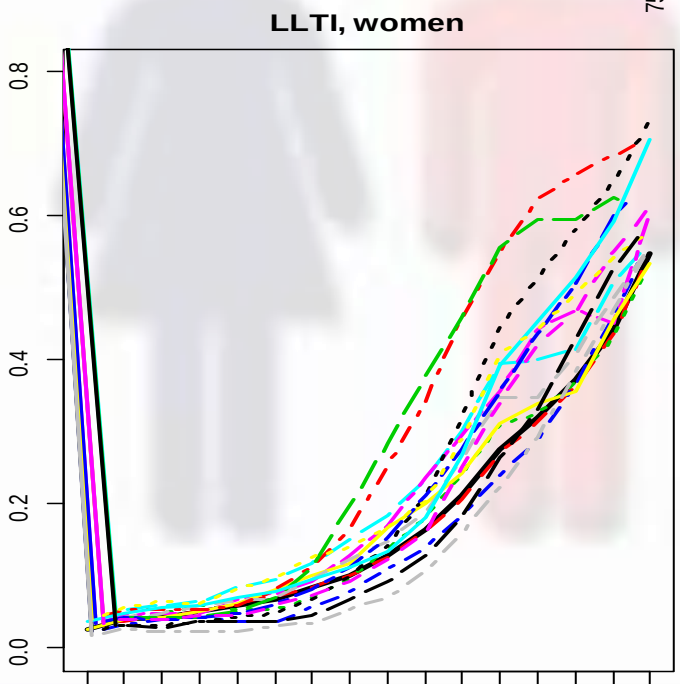
England and Wales, 2001 Census

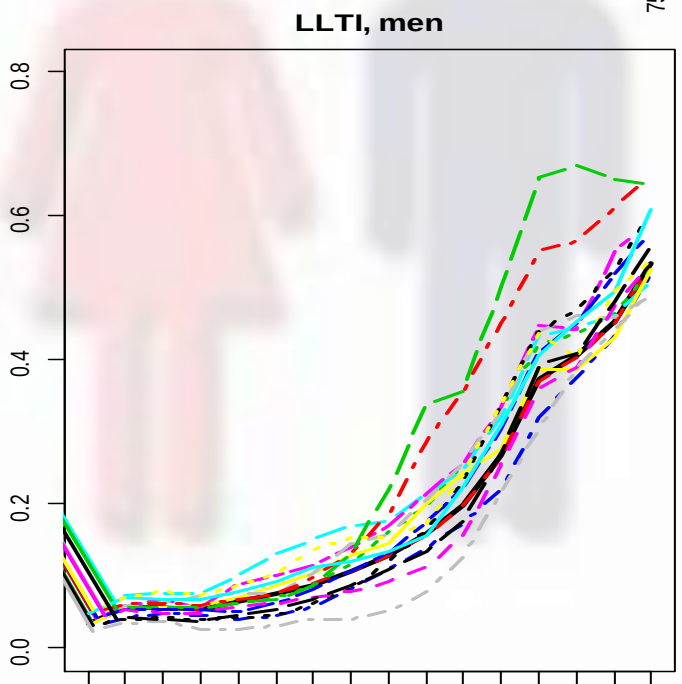
Prevalence of not good health and LLTI by age, gender and ethnic groups

LLTI prevalence higher than not good health



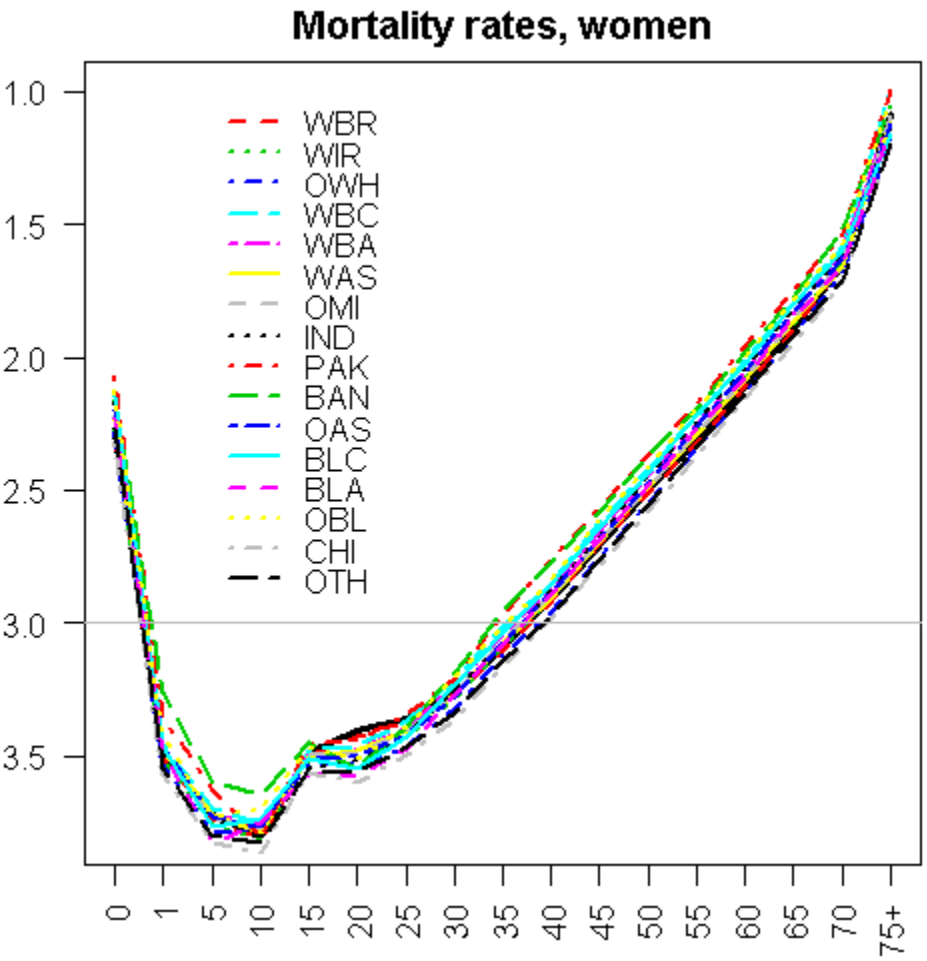


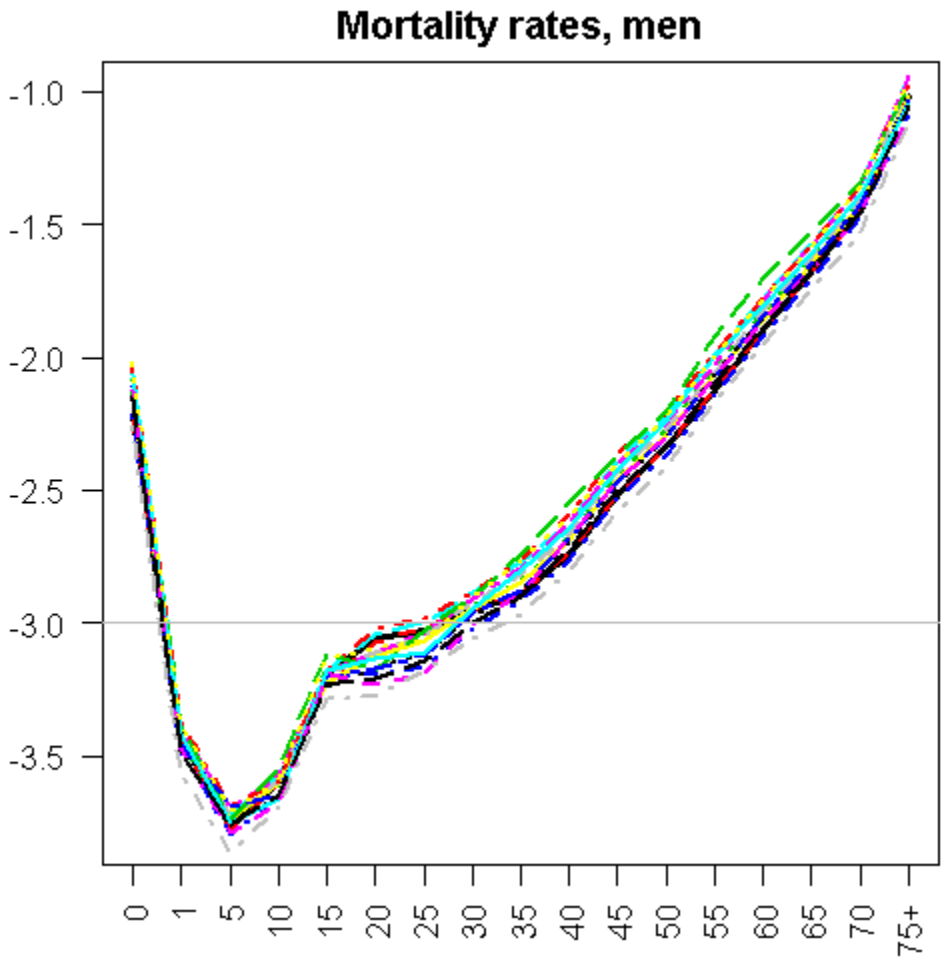




Data

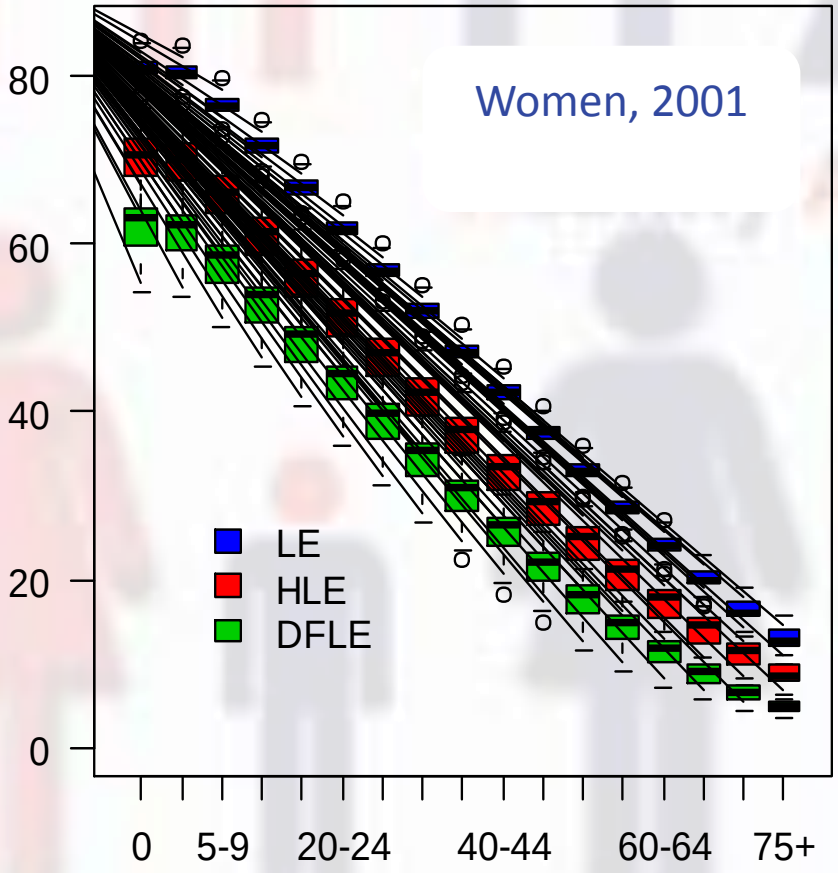
Estimated mortality rates, 2001

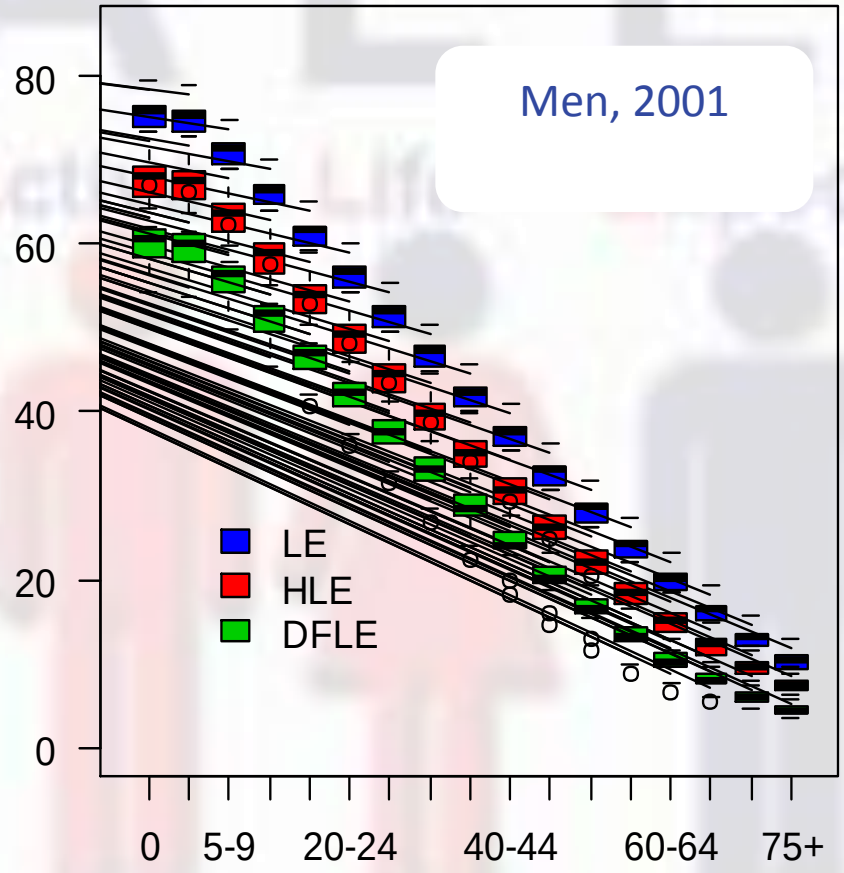




Results

LE, DFLE and HLE across 16 ethnic groups



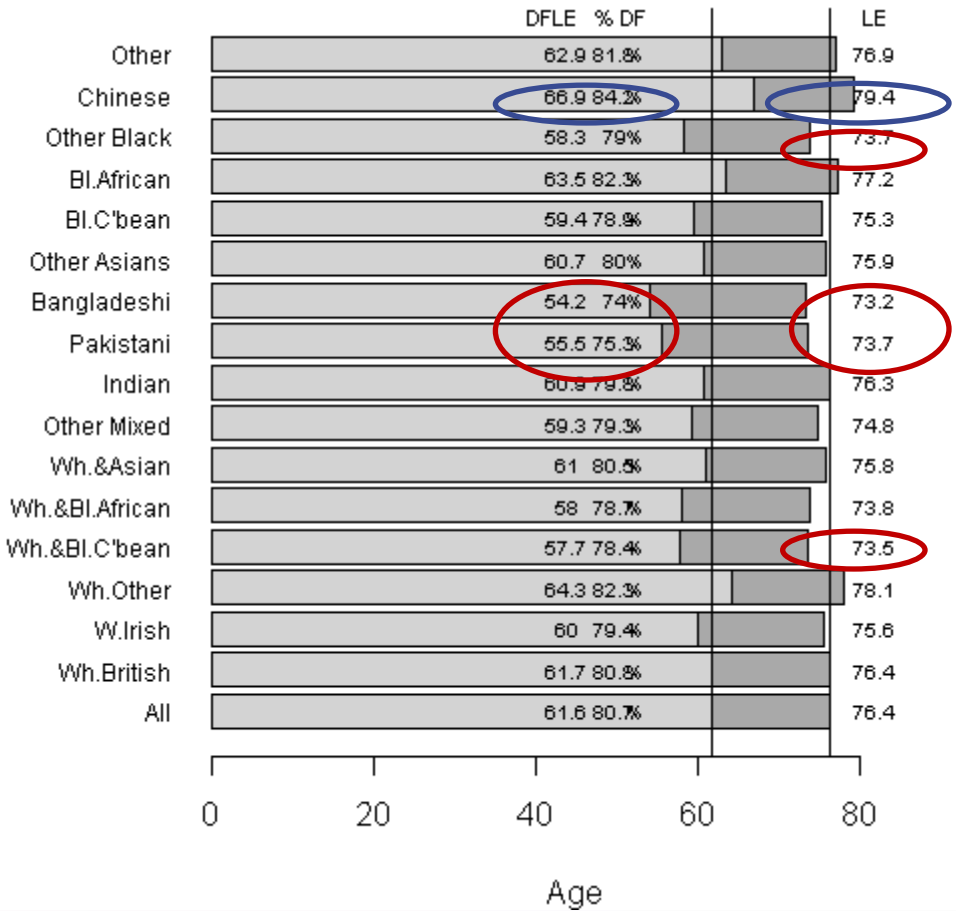


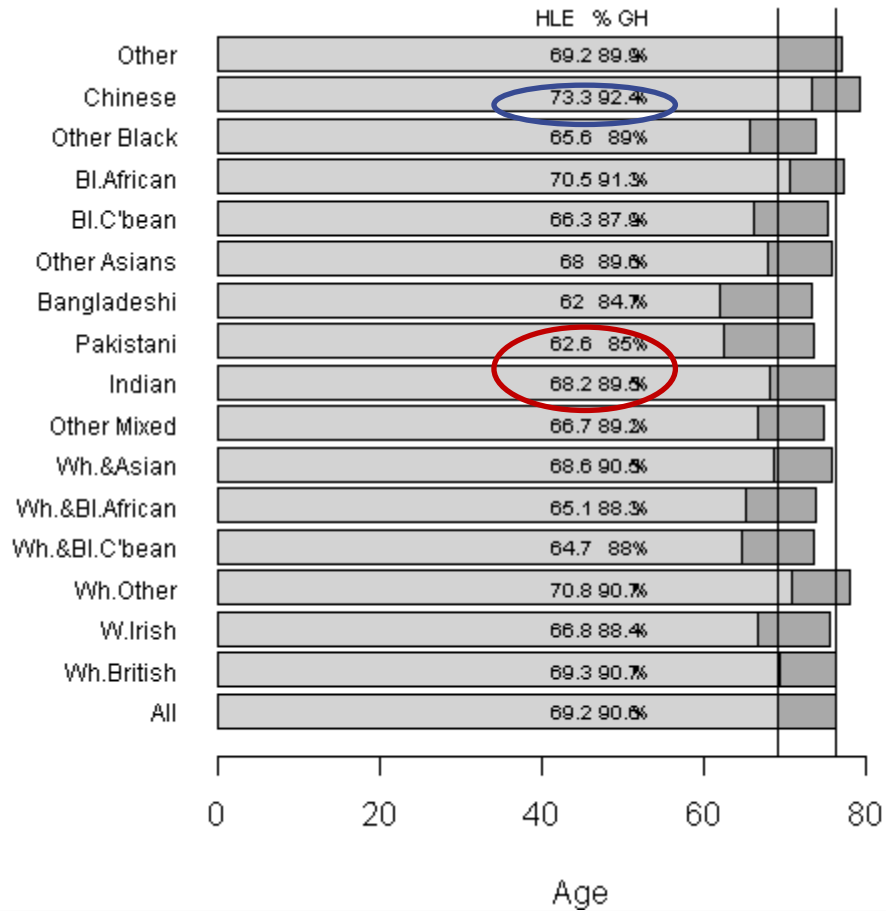
Results

LE, DFLE, HLE across 16 ethnic groups

♂ at birth

Highest LE, DFLE and HLE for Chinese men, lowest for in Pakistani and Bangladeshi group. Even though LE of Wh.&Bl.C'bean and Other Black similar low, more time spend without disability and in good/fair health.



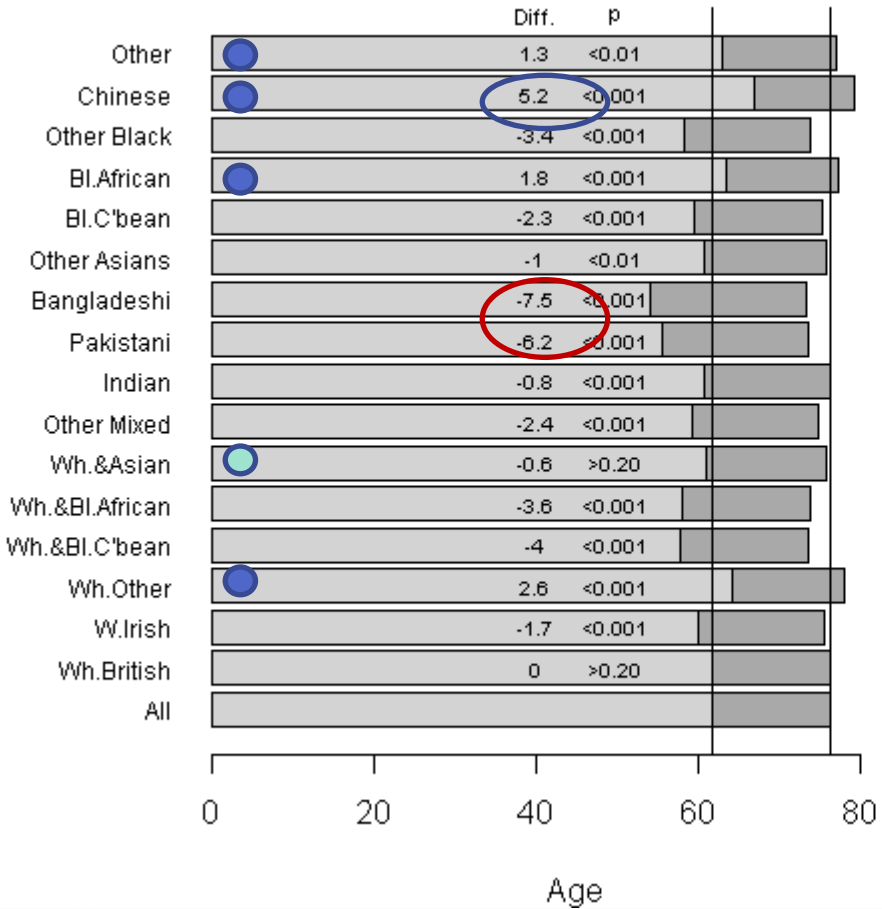


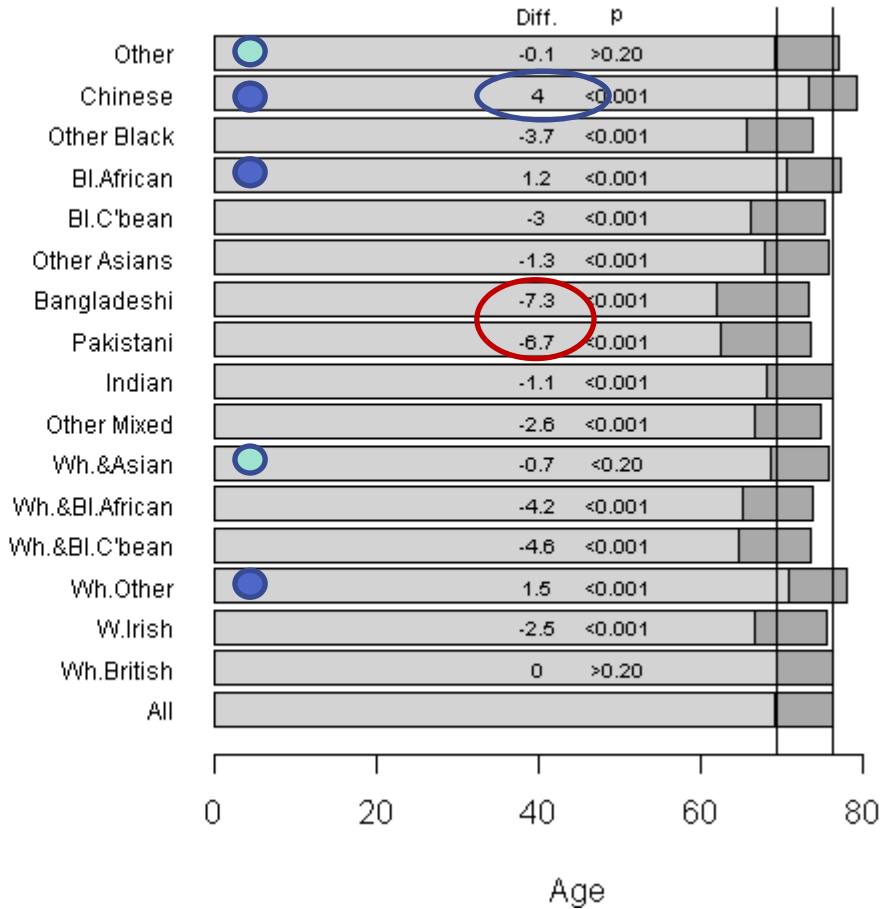
Results

Differences in DFLE and HLE between Wh.British and other groups

♂ at birth

White Other, Black African, Chinese and Other groups have significantly higher DFLE and HLE Compared to the White British group. Especially Bangladeshi and Pakistani groups have Significantly health expectancies.



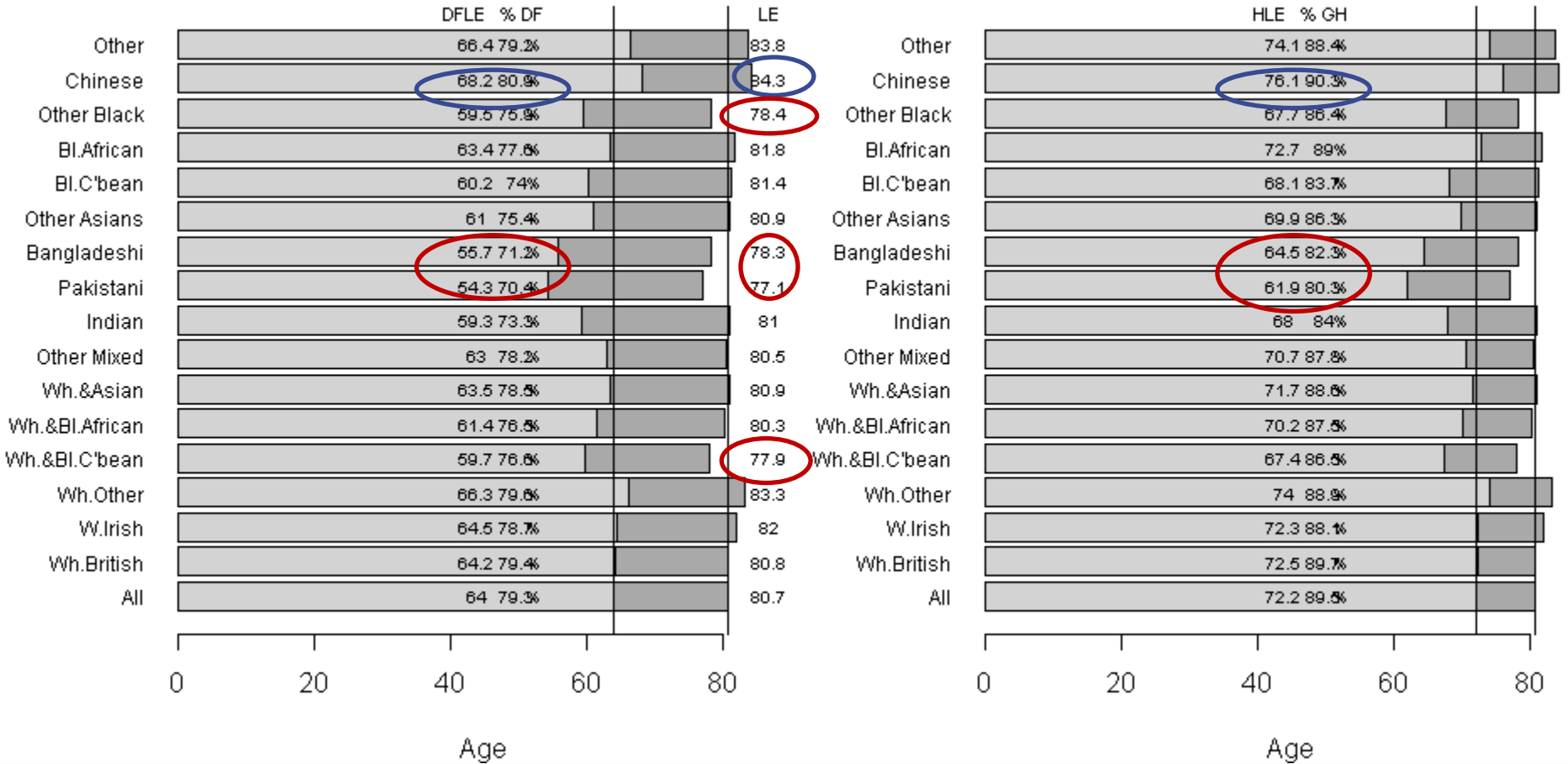


Results

LE, DFLE, HLE across 16 ethnic groups

♀ at birth

Women have higher LE, DFLE and HLE compared to men. Pattern of variation between Groups are similar to the once observed in men. Women spend more time with disability/ Not good health compared to men.

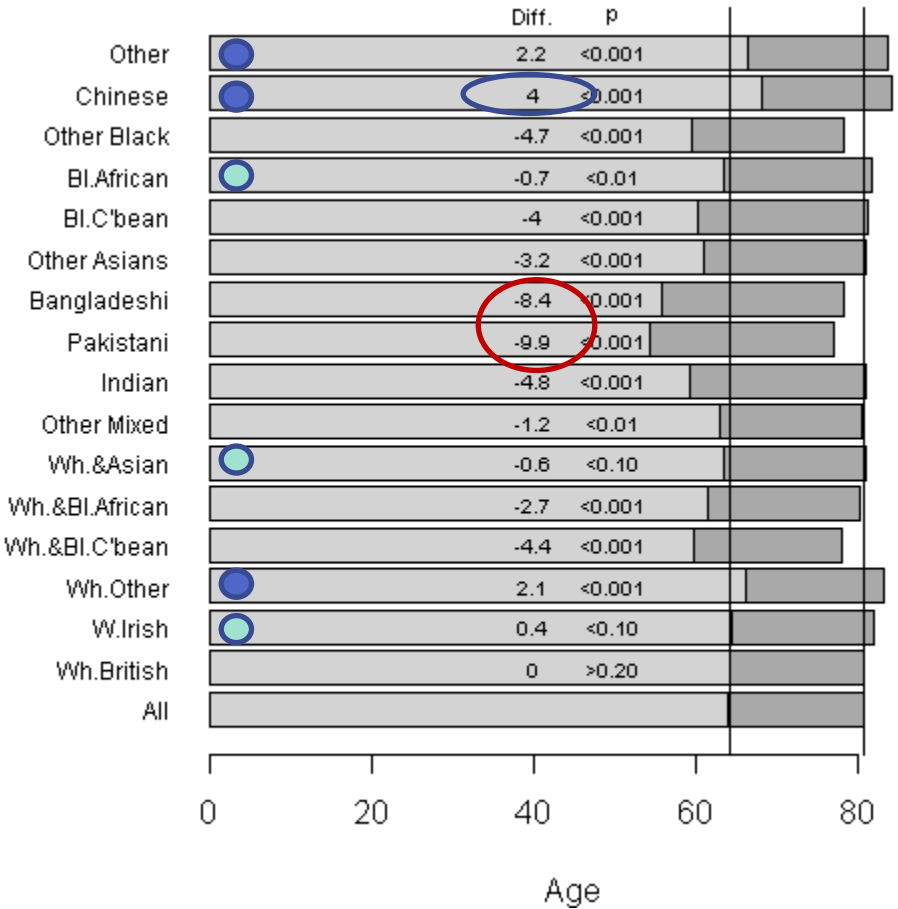


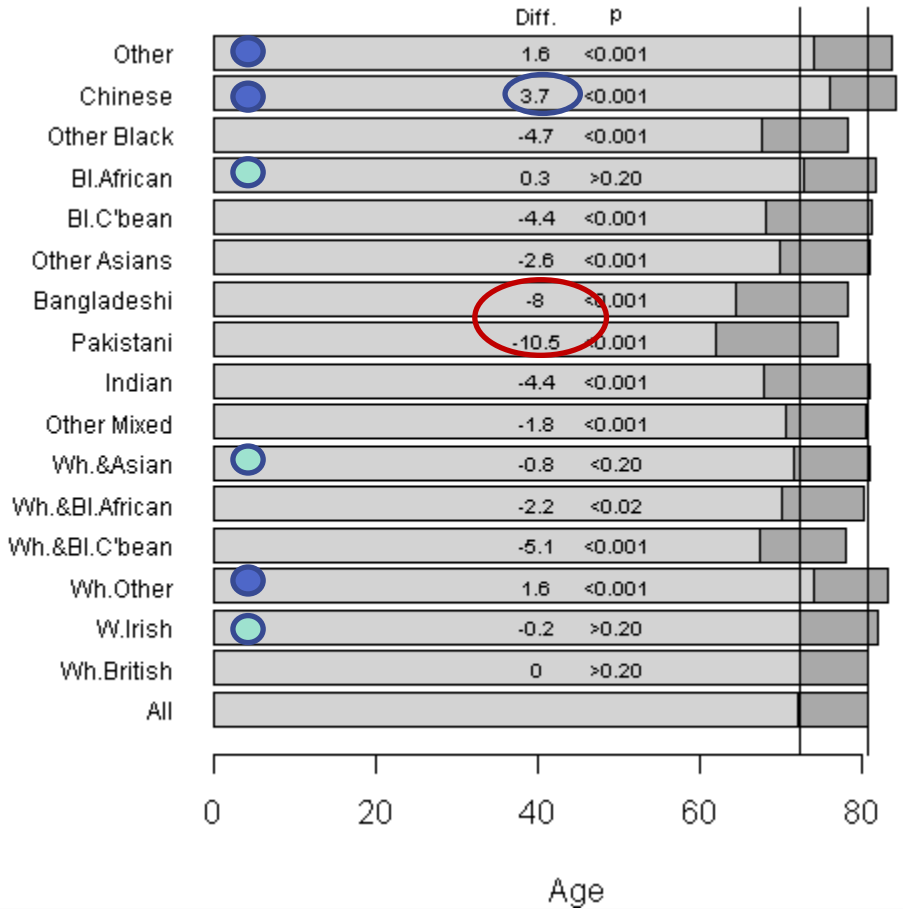
Results

Differences in DFLE and HLE between Wh.British and other groups

♀ at birth

Similar to men, great differences between the White British (WBR) group and the Pakistani and Bangladeshi group. No significant difference between the White Irish (WIR) women and WBR women, whereas WIR men have sig. lower health expectancies.



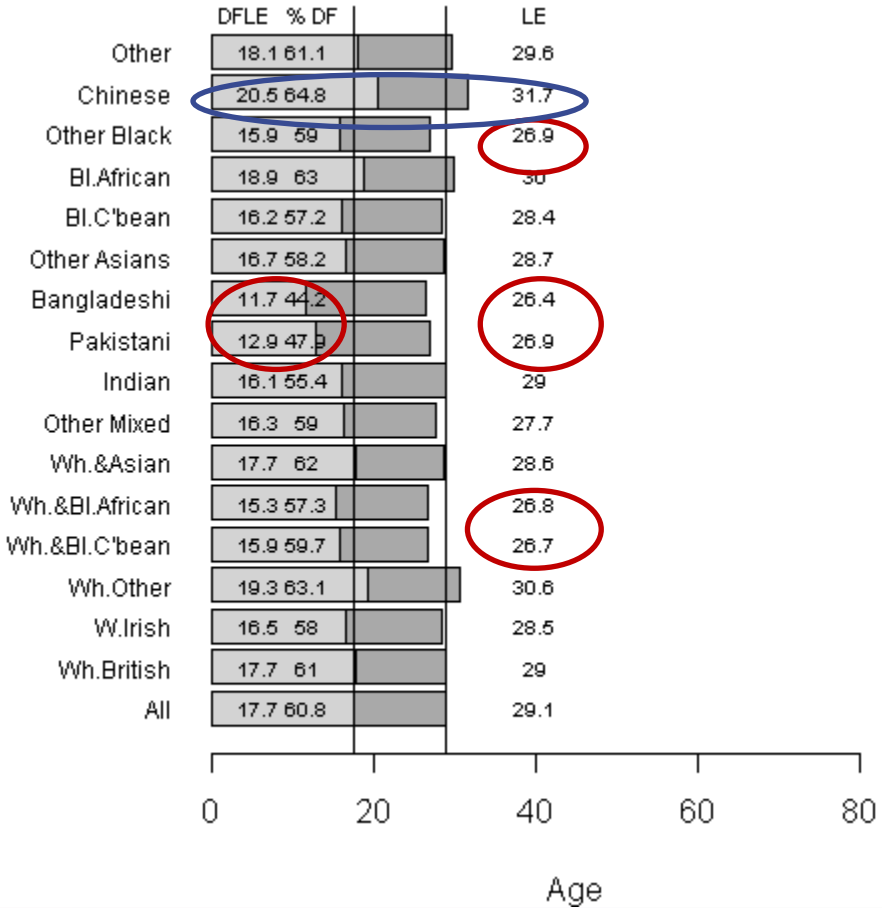


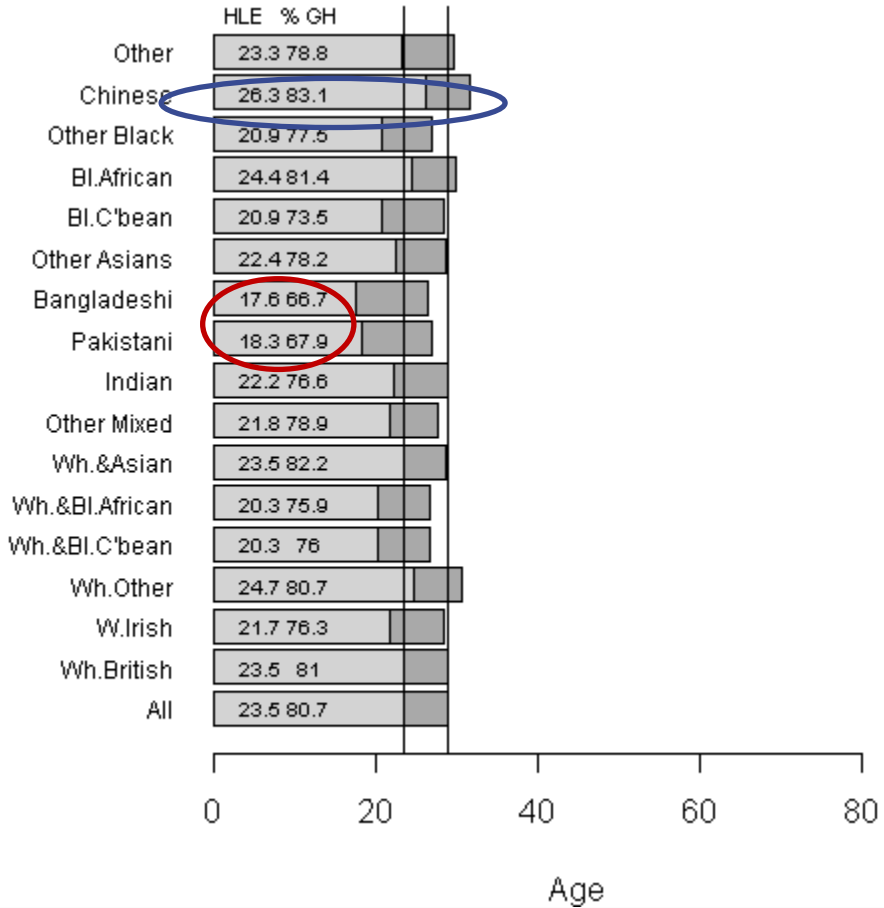
Results

LE, DFLE, HLE across 16 ethnic groups

♂ age 50

Several groups have similar low LE, but Pakistani and Bangladeshi groups have lowest health expectancies.



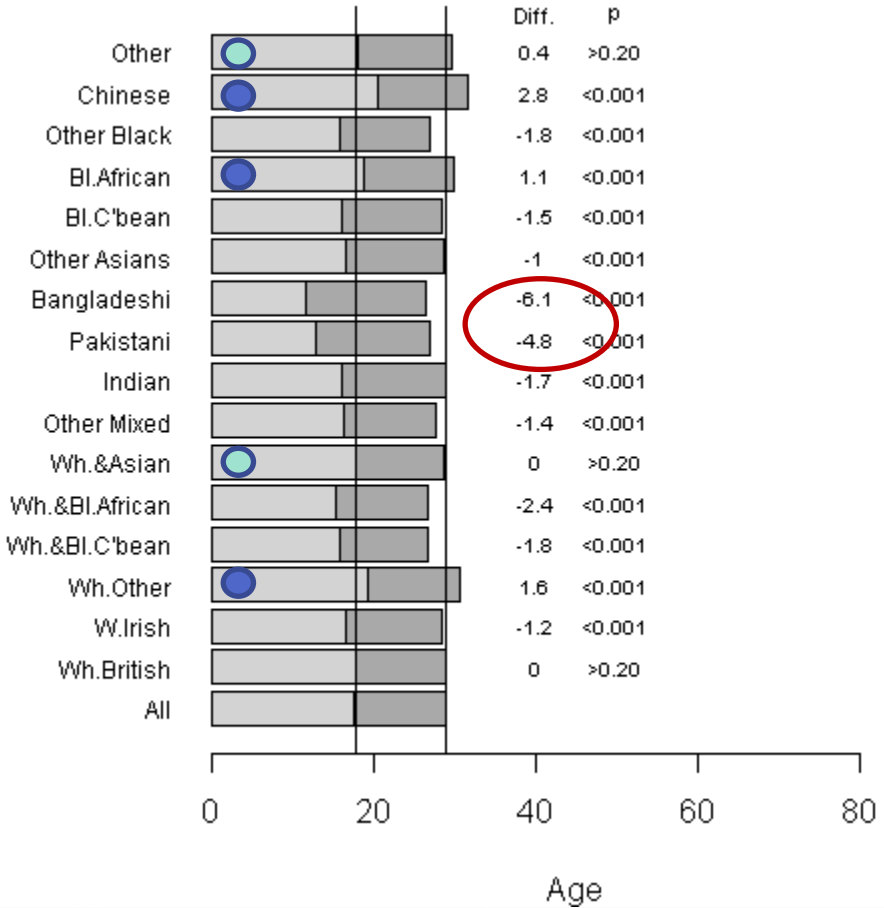


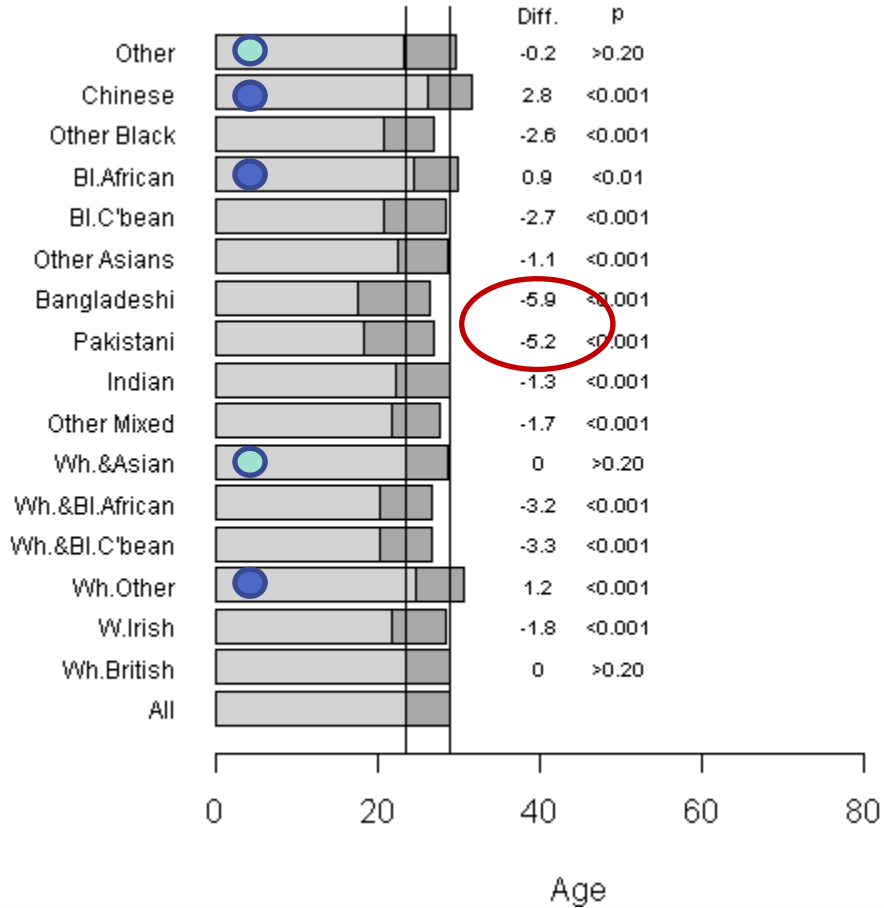
Results

♂ age 50

Differences in DFLE and HLE between Wh.British and other groups

By far the largest difference in DFLE and HLE are seen in Bangladeshi men, followed by Pakistani men.



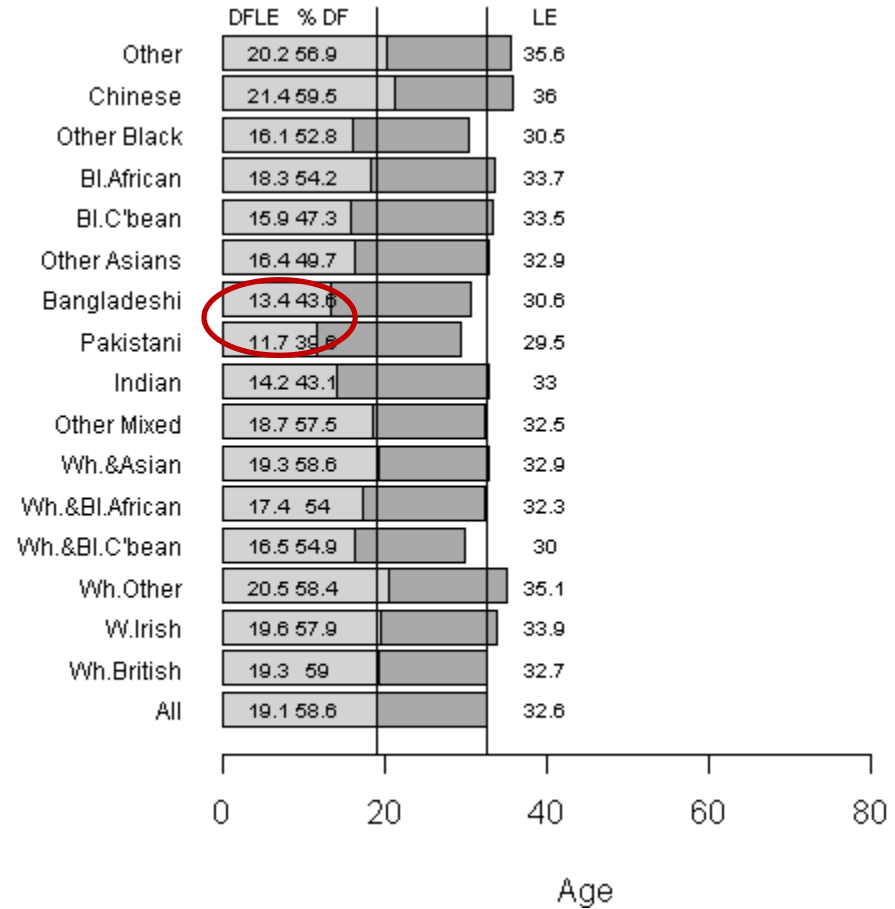


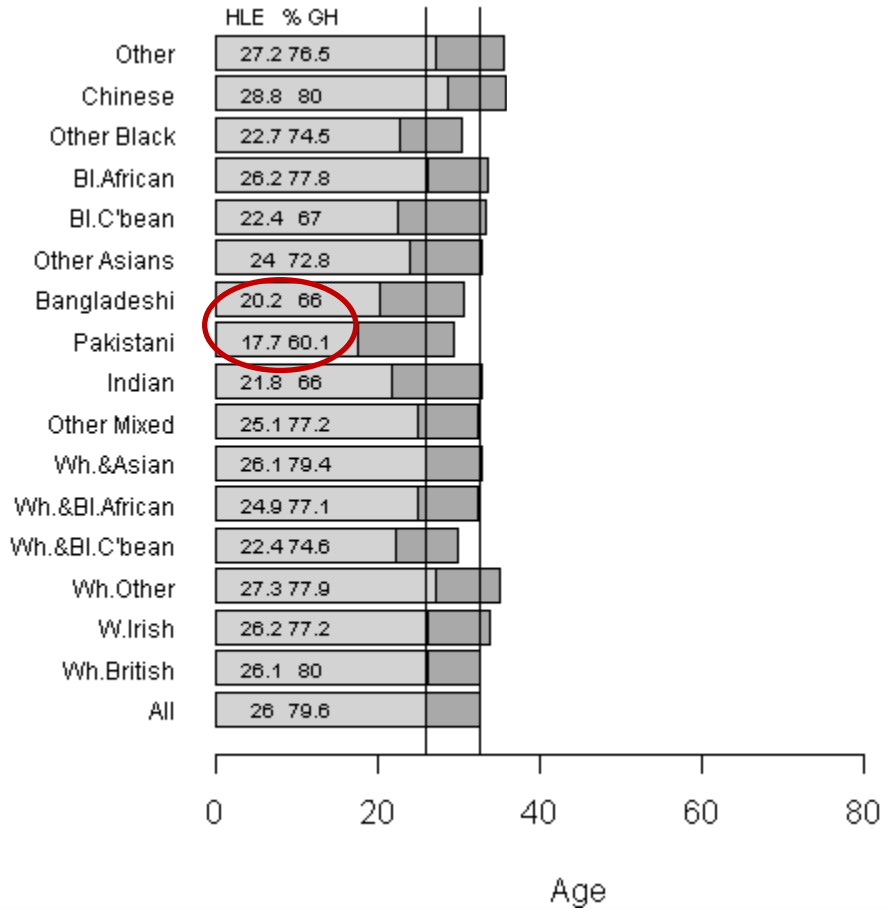
Results

LE, DFLE, HLE across 16 ethnic groups

♀ age 50

Here as well, several groups have similar LE, but Pakistani women in particular have lower health expectancies compared to other groups. Bangladeshi and Indian women can expect to spend similar %time disability free/in good and fair health.



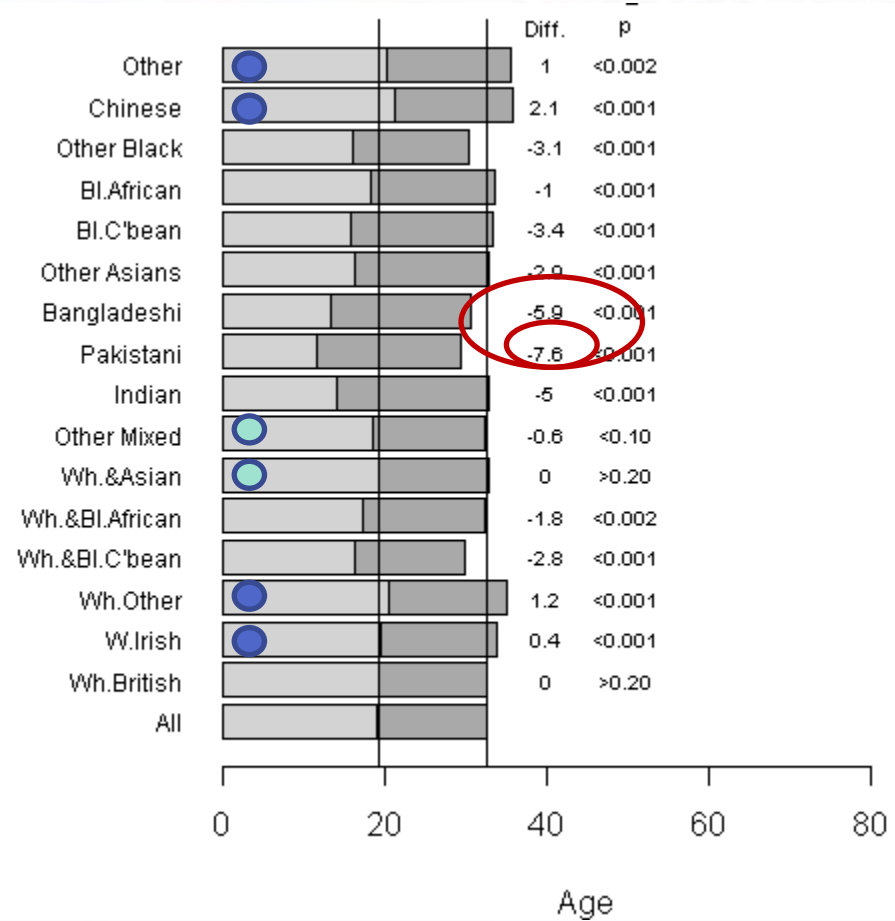


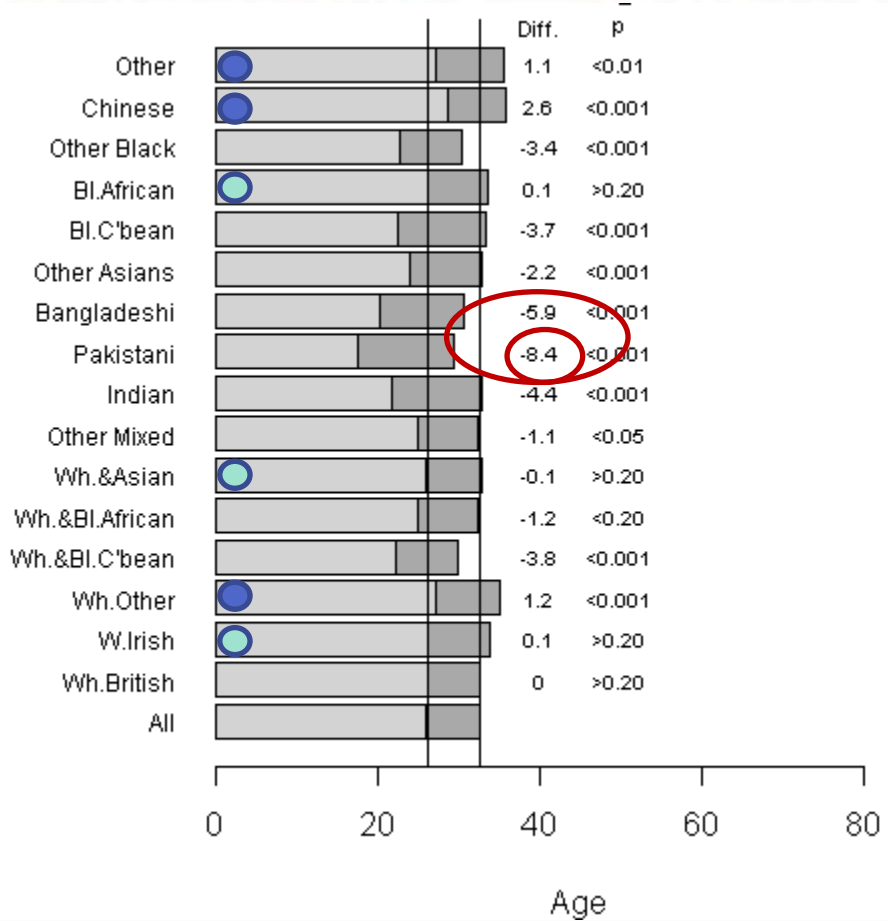
Results

Differences in DFLE and HLE between Wh.British and other groups

♀ age 50

Indian women 5 years lower DFLE compared to White British women. Similar to the Difference observed at birth, relative increase.



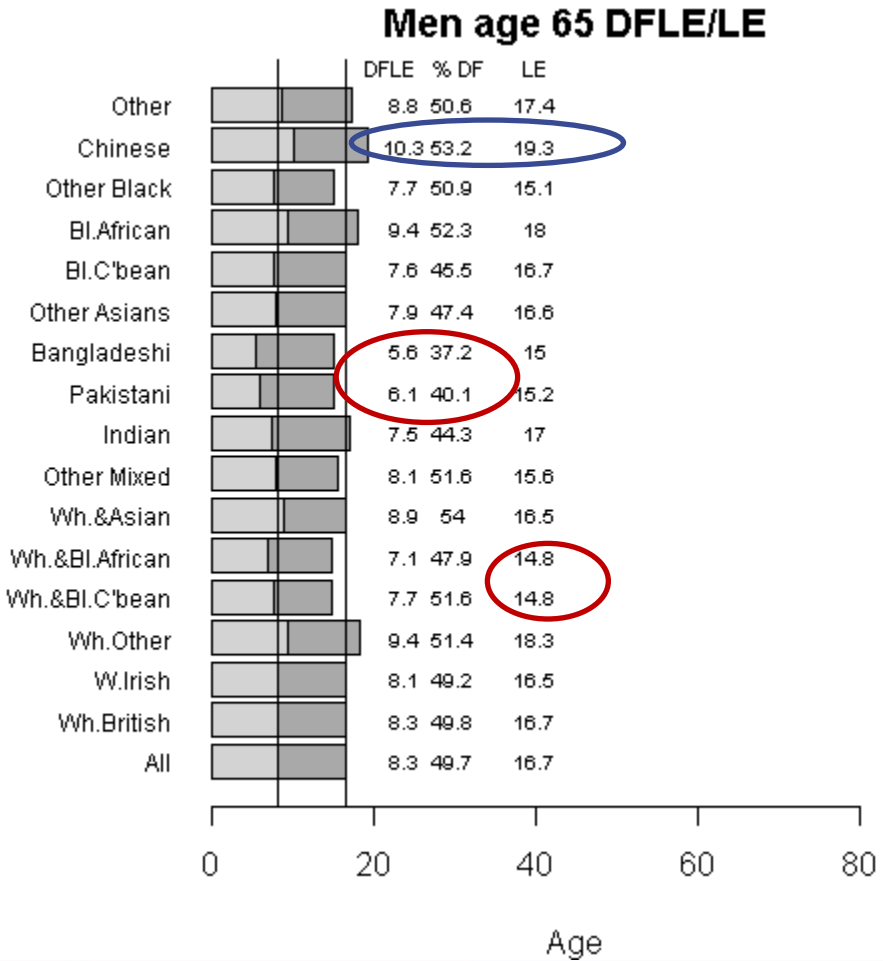


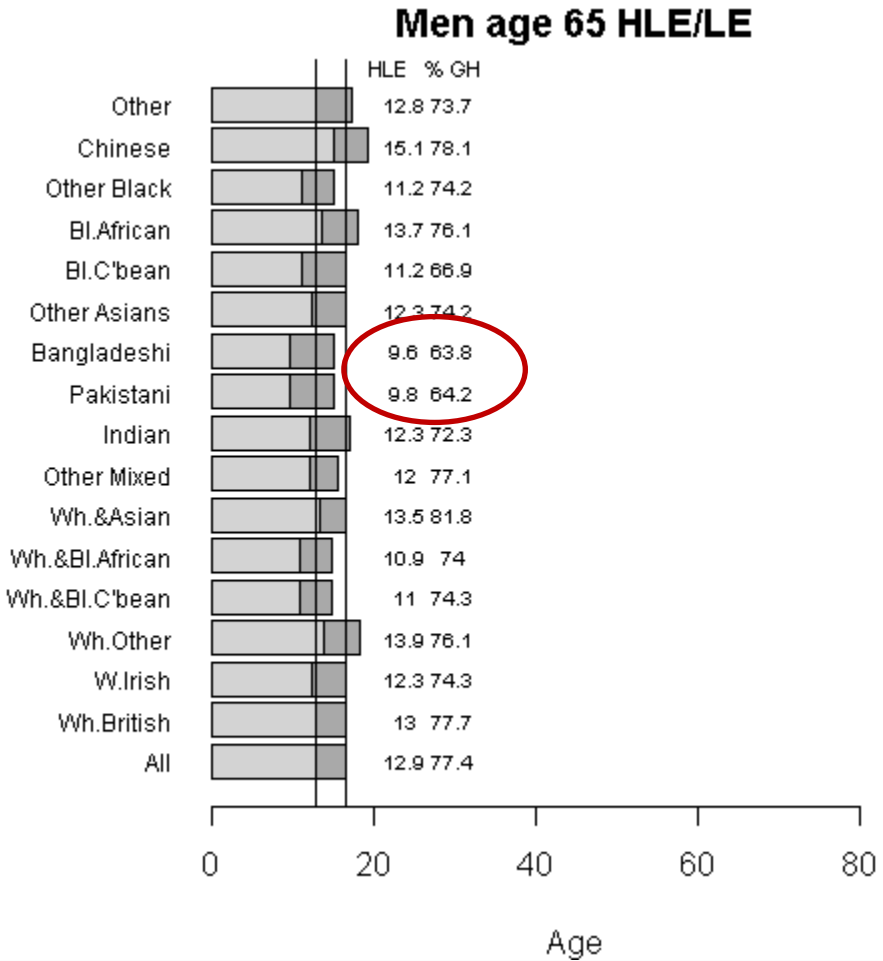
Results

LE, DFLE, HLE across 16 ethnic groups

♂ age 65

White & Black African and White & Black Caribbean have lowest LE.



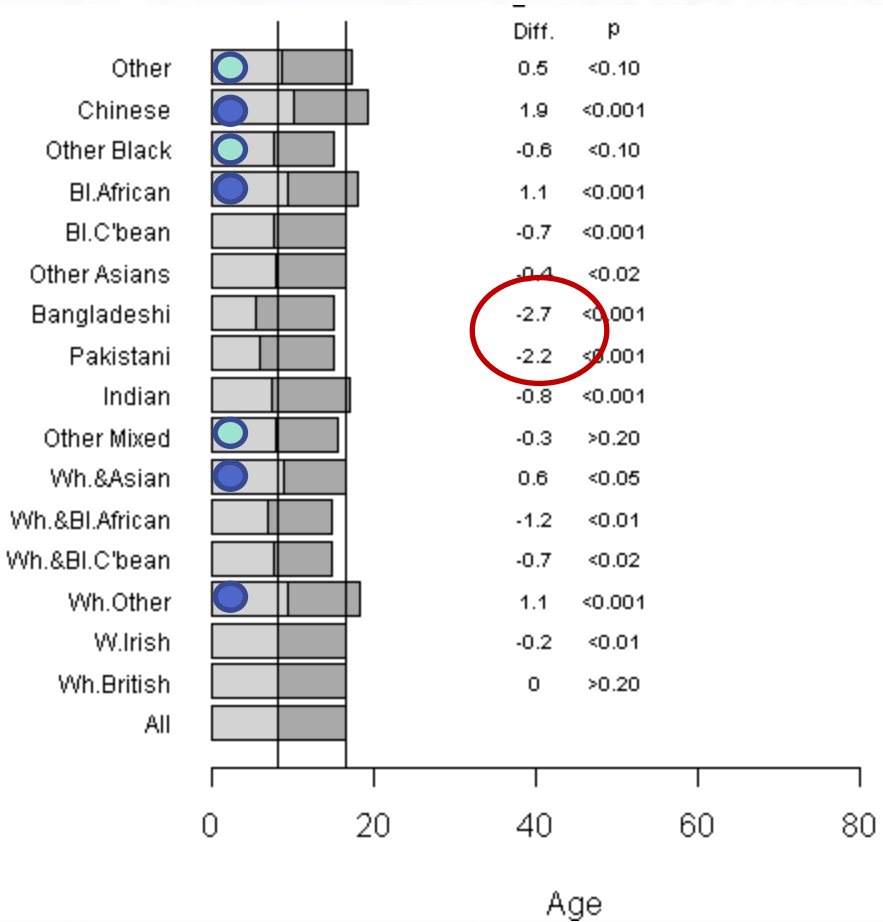


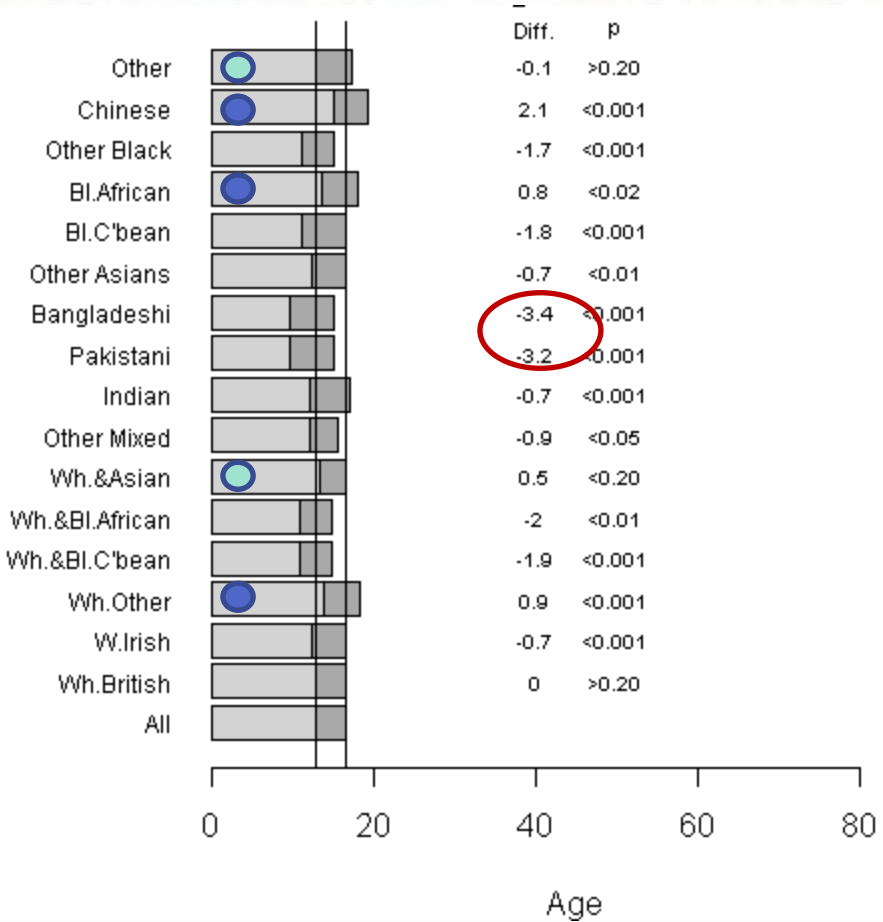
Results

♂ age 65

Differences in DFLE and HLE between Wh.British and other groups

Other Black men and White & Asian men: variation in significance of differences between DFLE and HLE.



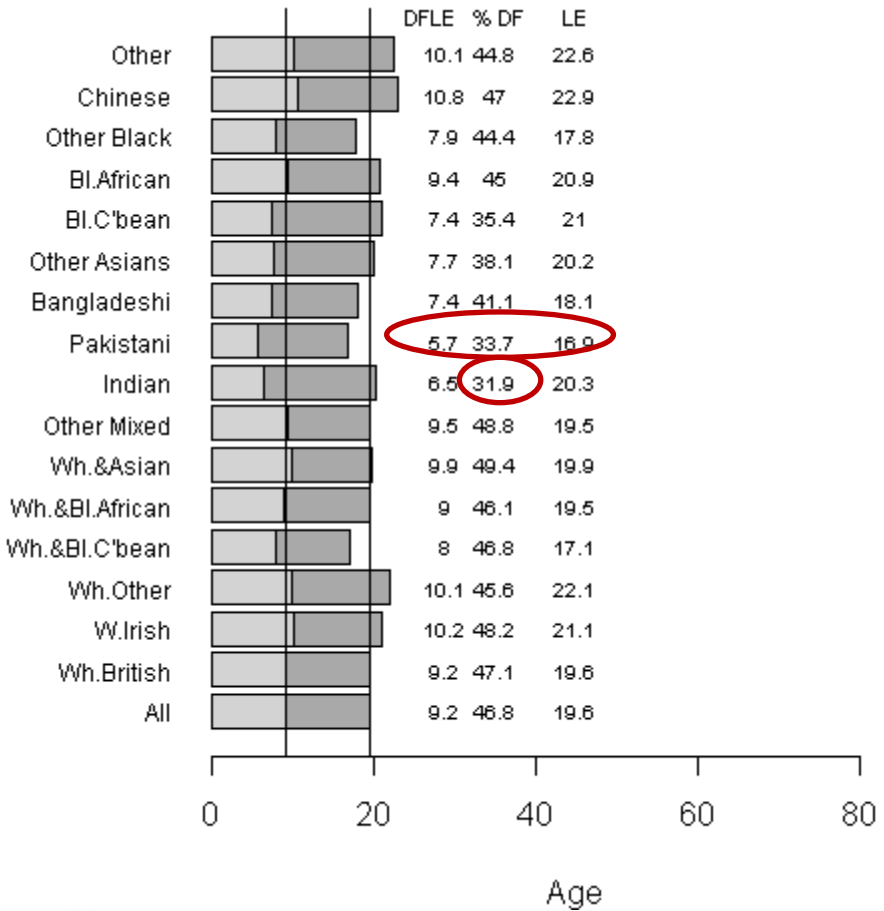


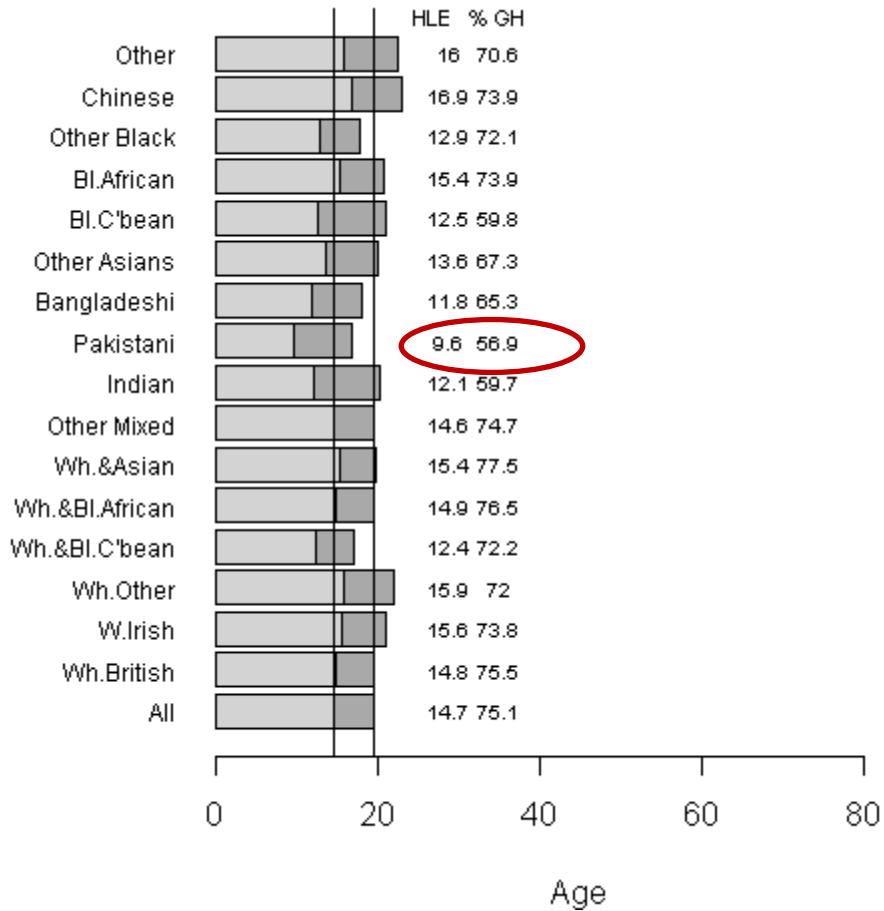
Results

LE, DFLE, HLE across 16 ethnic groups

♀ age 65

Lowest LE, DFLE and HLE for Pakistani women. Even though Indian women have higher LE and DFLE, they spent only ~32% without LLTI.



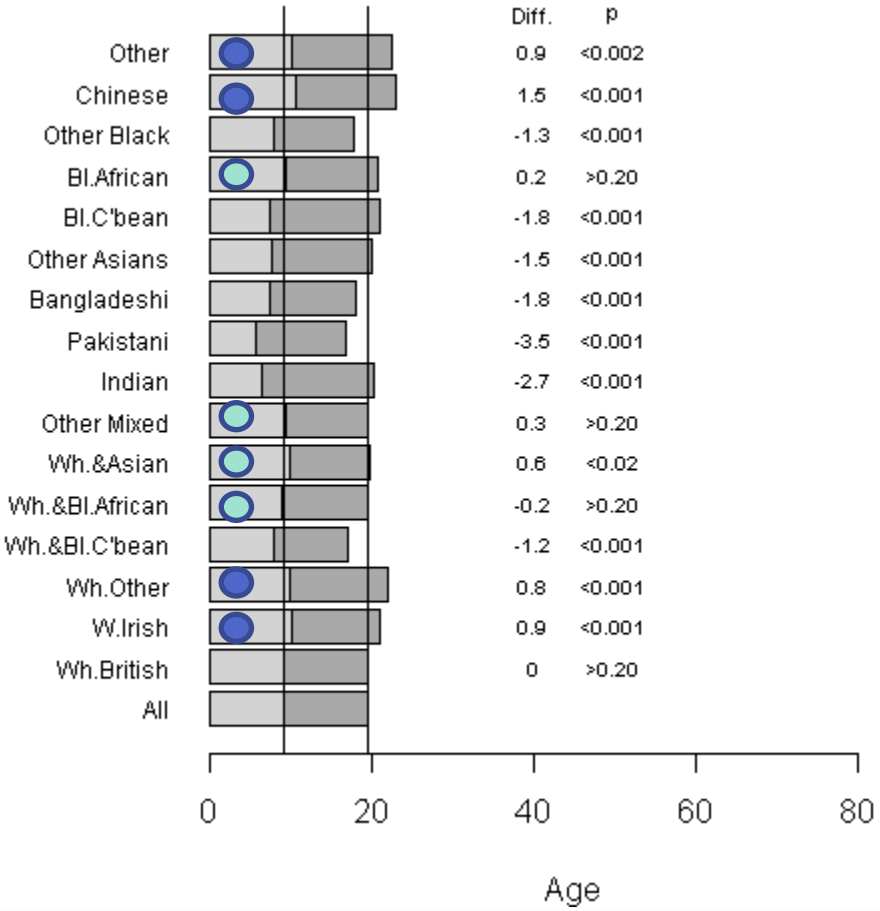


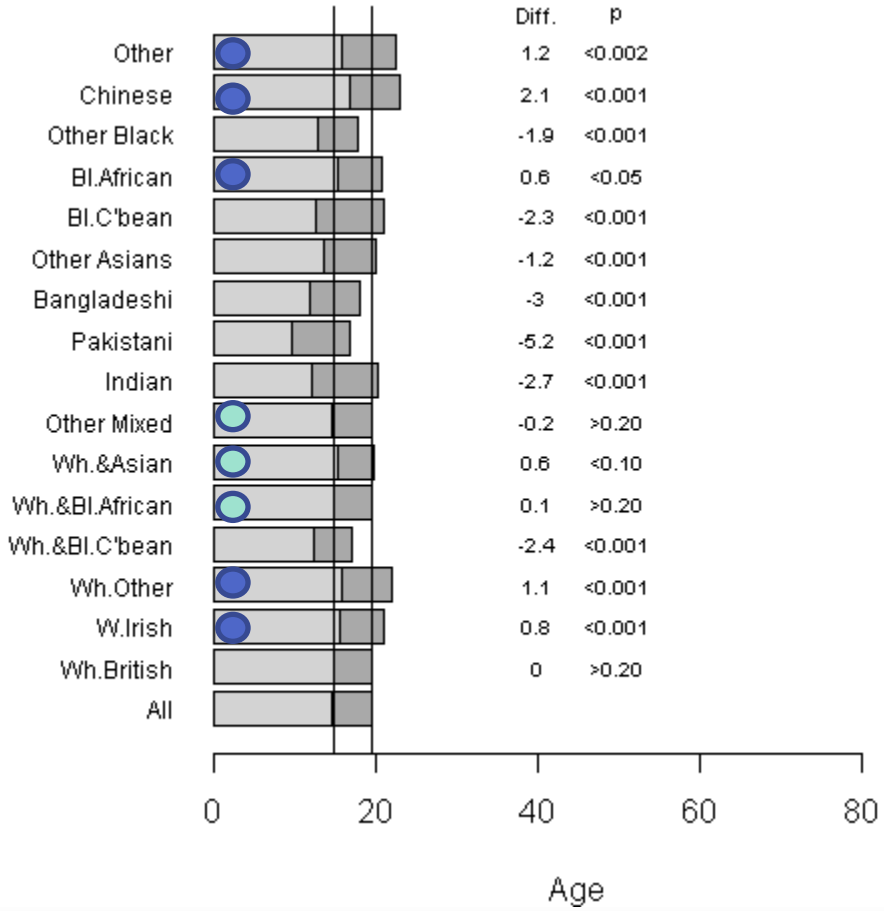
Results

Differences in DFLE and HLE between Wh.British and other groups

♀ age 65

Older ages, White Irish Women sig. better health expectancy than White British Women. Black African, Other Mixed, White & Asian and White & Black African women no difference to White British women DFLE and HLE as well (except Black African).





Conclusions

- Life and health expectancies differ considerably between ethnic groups
- For men at birth
  - highest LE is for Chinese men 79.4
- lowest for Bangladeshi men (73.2) closely followed by Pakistani men (73.7)
- This pattern is similar for health expectancies, where Chinese men can expect to live most years without a disability and in fair / good health and Pakistani and Bangladeshi men the fewest years.
- Similar patterns are seen at other ages and in women.

Conclusions

- In most instances the observed differences between a minority ethnic group and the White British group are significant.
- Differences are in both directions
- Mostly differences in DFLE and HLE between an ethnic group and the White British group follow the same direction with the exception of White Irish and Black African Women
- DFLE and HLE do not always follow the pattern of LE, groups with same/similar LE can vary considerably in health expectancy
- Women have higher LE and health expectancies compared to men, but can expect to spend more % of their life time with a limiting long term illness or in not good health. This difference is more pronounced in some Asian groups compared to other groups or the total population.

Outlook

How can differences be explained

- Socioeconomic status/Deprivation
- Country of Origin?
- Healthy migrant effect?
  - immigrant generation composition
- Bias in reporting health/illness?

References

- Data source: Adapted from data from the Office for National Statistics licensed under the Open Government Licence v.1.0.
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Thanks!

- Workshop tomorrow on how to calculate and interpret health expectancies

- Project webpage :http://research.ncl.ac.uk/InHALE