

Organ donors - can the NHS Organ Donor Register make a difference?



UK Transplant

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Background

- ACORN geo-demographic classification data assign socio-economic scores to each postcode area in the UK. This enables the population to be divided into five broad categories.
- Comparing these category profiles for donors with those for the general population and NHS Organ Donor Register (ODR) registrants may identify areas where the potential for donation is unmet and could be improved.
- The classifications are based on demographic information from the 2001 Census and lifestyle data from CACI's consumer lifestyle database.

ACORN categories

The general characteristics associated with people in each category are:

- Wealthy achievers** Affluent managers or professionals; owner occupied large houses; well educated; middle-aged or older.
- Urban prosperity** Highly educated young professionals; wealthy older people; urban lifestyle.
- Comfortably off** Skilled or professional occupations; owner occupied semi or detached houses.
- Moderate means** Traditional blue-collar occupations or services and retail; average income.
- Hard-pressed** High unemployment; rented accommodation; single adult households.

Data

In England and Wales from 1 January 2000 to 30 September 2004:

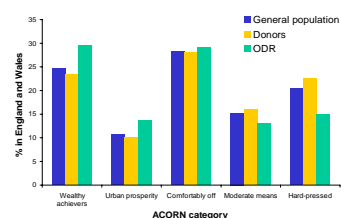
- 2,718 deceased solid organ donors.
- 535,720 new registrants onto the NHS Organ Donor Register.

ACORN classification data were provided by CACI Ltd. for:

- Each postcode area in England and Wales.
- The general population in England and Wales.

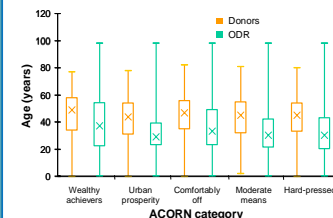
Results

Percentage of the general population, donors and new registrants on the ODR, by ACORN category



- The donor and general population profiles differ to some extent, $p=0.06$.
- The donor and ODR profiles were very different, $p<0.001$. Compared with donors, 'wealthy achievers' and 'urban prosperity' were over-represented on the ODR but 'moderate means' and 'hard-pressed' were under-represented.

Age of donors and new registrants on the ODR, by ACORN category

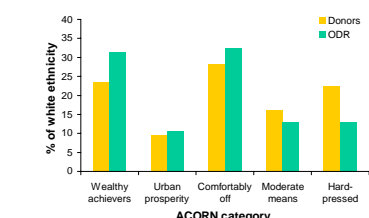


Box and whisker plots of donor and ODR registrant ages showing minimum and maximum values, the median and lower and upper quartiles.

- Donor ages were similar across all categories.
- ODR registrant ages were similar across all categories.
- Donors were slightly older than ODR registrants but not significantly so.

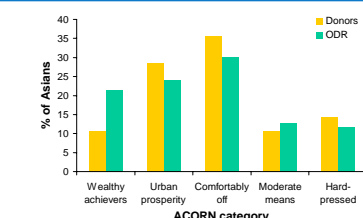
Ethnicity Comparing ACORN profiles within each ethnic group

White donors and new registrants on the ODR, by ACORN category



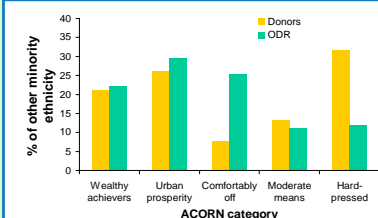
Compared with donors, white 'wealthy achievers' and 'comfortably off' were over-represented on the ODR but 'moderate means' and 'hard-pressed' were under-represented.

Asian donors and new registrants on the ODR, by ACORN category



- 28 (1.0%) donors and 2,557 (1.1%) ODR registrants were Asian.
- Compared with donors, Asian 'urban prosperity' and 'comfortably off' were under-represented on the ODR and 'wealthy achievers' were over-represented.

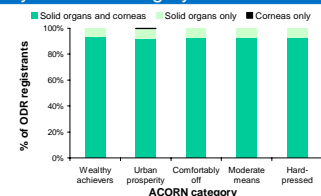
Other minority ethnic donors and new registrants on the ODR, by ACORN category



- 38 (1.4%) donors and 6,957 (3.1%) ODR registrants were from other minority ethnic groups.
- Compared with donors, 'comfortably off' from other minority ethnic groups were over-represented on the ODR and 'hard-pressed' were under-represented.

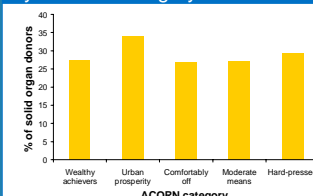
ODR

Organs new ODR registrants are willing to donate, by ACORN category



Overall 93% of new registrants on the ODR stated they were willing to donate one or more solid organs and their corneas. This was consistent across the ACORN categories.

Percentage of donors who were registered on the ODR, by ACORN category



- Overall 28% of donors were registered on the ODR.
- Similar percentages were found in each ACORN category although it was highest, 34%, for 'urban prosperity'.

Summary

The socio-economic profiles of solid organ donors in England and Wales differed slightly from that of the general population:

- There were proportionally fewer 'wealthy achievers' and more 'hard-pressed' amongst the donors than the general population.

The profiles for solid organ donors and new registrants on the ODR differed markedly:

- 'moderate means' and 'hard-pressed' were better represented amongst donors than ODR registrants but 'wealthy achievers' and 'urban prosperity' were not as well represented.

Such information can be used to help develop strategies to promote awareness of organ donation.