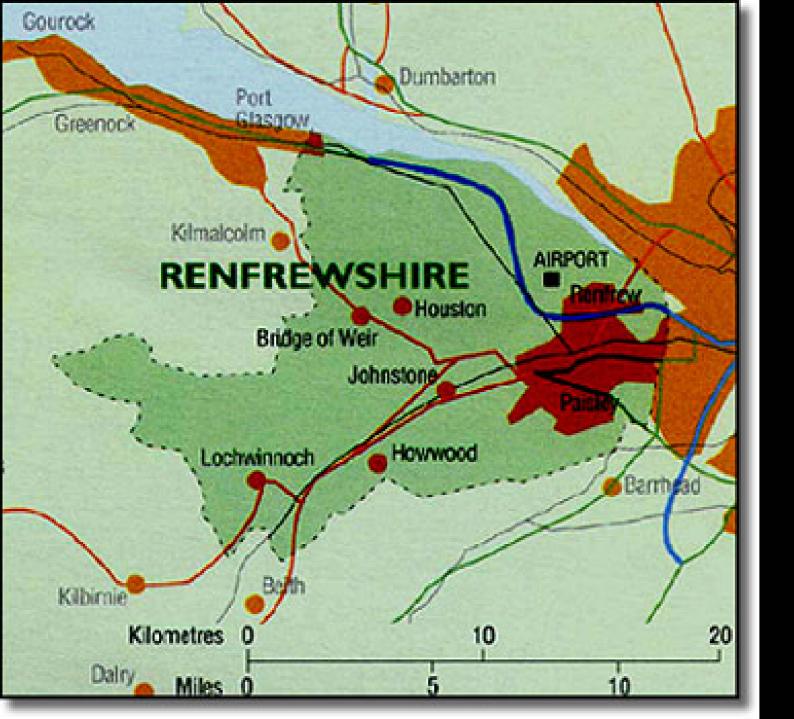
Celebrating 30 years of the MIDSPAN Studies



GEORGE SOUARE

PAISLEY TOWN CENTRE



LIFE EXPECTANCY AT BIRTH IN RENFREWSHIRE

| | MEN | WOMEN |
|---------------------------|-------|-------|
| Scottish ranking | 29/32 | 28/32 |
| 1992-4 | 70.7 | 76.9 |
| 2002-4 | 71.8 | 78.2 |
| Increase | 1.1 | 1.3 |
| Average Scottish increase | 2.1 | 1.6 |

SOURCE : Registrar General for Scotland, 2005



Numbers

Occupational

COLLABORATIVE (1970-73)

7,028

General population

RENFREW and PAISLEY (1972-76) 15,402

FAMILY STUDY (1996)

2,338



RENFREW AND PAISLEY STUDY

7049 men and 8353 women aged 45-64 in 1972-76

80% of the general population

Cardio-respiratory screening survey at baseline

Follow up for mortality, cancer incidence and hospital admissions

Over 25 years of follow up



| mid span health plan | n ent un bevo por even electric electric arte el 5 1 |
|---|--|
| conducted by the Glasgow MMR Cardiorespiratory Screening Unit and the Department of Epidemiology and Preventive Medicine of the University of Glasgow | |
| MMR Reference Number | |
| Questionnaire | For official use only |
| All information which could permit identification of the individual will be treated as strictly confidential, will be used only by persons engaged in and for the purposes of this survey. and will not be disclosed for any other purpose. | 1.01 1.02 1.03 1.04 1.05 1.06 1.07 |
| Please answer all the questions in this health record, and bring it with you when you come to the unit. Write a tick in the appropriate boxes. If you cannot give an exact answer, give the best estimate you can. | |
| Surname (Mr., Mrs., Miss) (BLOCK LETTERS) | an o slow 5 of other definition of 01 50 botter (|
| Christian names | nation channel to have pag do the state |
| Works no: | 1.09 |
| Dept no : | tend nory tanks solvering and and a solution of the solution o |
| Family doctor Dr. | |
| Address | |
| 1 a What is your occupation ? (Please describe as fully as possible) | |
| | 1.10 1.11 1.12 |
| b Are you 1 □ a manager? 2 □ a foreman? | the second biological second sec |
| 3 an employee? 4 self-employed without employees? 5 self-employed with employees? | 12 Do you drivé a cur régularity? |
| 2 a What is your date of birth ? Day of month Month Year | 1114 1.15 1.16 1.17 1.18 1.19 |
| | 1,14 1.15 1.16 1.17 1.18 1.19 |
| b Were you born 1 □ in the country? (isolated dwelling, hamlet or small community) 2 □ in a village? | ennin gerelalia bra dela ang ana ang |
| 3 in a town? 4 in a city? 5 elsewhere? (e.g. at sea) | |

CONFIDENTIAL

COLLECTED VARIABLES

QUESTIONNAIRE Sex. Marital status, date of birth Occupation, exercise, MRC bronchitis, chest wheeze Smoking habit Rose angina questionnaire Diabetes, severe chest pain Hospital admisions, BP Rx Asthma/hay fever

CLINICAL MEASUREMENTS Blood pressure, chest X-ray Tine test, sputum, plasma cholesterol, Blood sugar, cardiothoracic ratio, Height, weight, ECG Respiratory function, Biochemistry : Na, K, O2, Hb Carboxyhaemoglobin

DERIVED DATA BMI, social class, deprivation category

EARLY ORIGINS

BASELINE CHARACTERISTICS

MEN

Shorter stature Higher blood pressure More smokers Fewer ex-smokers Lower FEV1 More reported angina More breathlessness on effort More COPD

WOMEN

Shorter stature Higher cholesterol Fewer smokers Fewer ex-smokers Lower FEV1 More breathlessness on effort

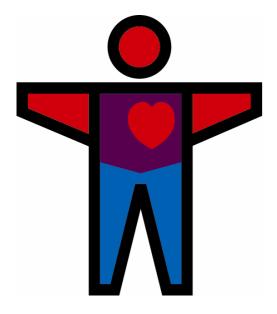
SOCIAL CLASS AND DEPRIVATION CATEGORY IN MEN

SOCIAL DEPRIVATION CATEGORY

| CLASS | | | | | | | |
|--------|-------------|--------------|---------------|---------------|---------------|-------------|------------|
| | 1 | 3 | 4 | 5 | 6 | 7 | ALL |
| I. | 114 | 90 | 48 | 72 | 19 | 2 | 345 (5%) |
| II | 234 | 196 | 200 | 224 | 102 | 9 | 965 (14%) |
| III NM | 102 | 123 | 207 | 252 | 132 | 12 | 828 (12%) |
| III M | 114 | 235 | 616 | 1069 | 626 | 134 | 2794 (40%) |
| IV | 52 | 122 | 325 | 575 | 383 | 9 5 | 1552 (22%) |
| V | 6 | 16 | 64 | 132 | 135 | 80 | 433 (6%) |
| ALL | 622 (9%) | 782 (11%) | 1460 (21%) | 2324 (34%) | 1397 (20%) | 332 (5%) | 6917 |

HEIGHT BY SOCIAL CLASS AND DEPRIVATION CATEGORY IN MEN

| SOCIAL CLASS | DEPRIVATION CATEGORY | | | | | |
|-----------------|----------------------|-----|-----|-----|-----|-----|
| CLA33 | 1 | 3 | 4 | 5 | 6 | 7 |
| I | 173 | 173 | 170 | 170 | 171 | 170 |
| II | 172 | 172 | 171 | 171 | 170 | 168 |
| III NM | 172 | 172 | 170 | 172 | 170 | 168 |
| III M | 171 | 170 | 169 | 169 | 168 | 168 |
| IV | 172 | 171 | 169 | 169 | 168 | 167 |
| V | 165 | 167 | 168 | 166 | 167 | 166 |



http://www.gla.ac.uk/faculties/medicine/midspan/





The 25th MIDSPAN publication

Blood pressure measurement at screening and in general practice

DH Barlow DG Beevers VM Hawthorne HD Watt GAR Young

British Heart Journal 1977; 39:7-12



RANKED CAUSES OF DEATH OVER 25 YEARS

| | W |
|-----------|------------------------------|
| 36% | C |
| 30% | C |
| 10% | St |
| 9% | R |
| 7% | 0 |
| 6% | 0 |
| 2% | D |
| | 30% 10% 9% 7% 6% |

WOMEN

| CHD | 30% |
|-------------|-----------|
| Cancer | 28% |
| Stroke | 15% |
| Respiratory | 8% |
| Other | 9% |
| Other CVD | 7% |
| Digestive | 3% |

Unpublished data, 2004



The MIDSPAN 75th Birthday Stakes

Lady Paisley

Female Non-smoker Social class 1 or 2

Paisley Buddie

Male Smoker Social Class 4 or 5 2 to 1 ON

70% survival

3 to 1 AGAINST 28% survival



TUESDAY, SEPTEMBER 7, 1993

V S L E

Daily Express

SEARCH FOR 3000 GUINEA PIG' KIDS Children of 70s families sought for new health tests

A MASSIVE search has been launched to find thousands of people who took part in a unique health study carried out in Paisley and Renfrew more than 20 years ago.

No. 37088

They are wanted to help in a new survey which will investigate why some families experience heart disease and cancer more than others.

The move comes as findings of the first survey, carried out between 1972 and 1976, show that for a given level of smoking the rate of lung cancer in Paisley

By Anne Dairymple

and Renfrew is twice as high as in other populations.

24p

Results also show that the statistics are the same for heart attacks and cholesterol count.

This time round, however, it's the children of the 4000 parents involved in the original study who are desperately wanted by researchers at Glasgow University.

"Out of the 15,000 people who originally took part there are just over 4000 married couples," said Dr Graham Watt one of the research team. "The problem for us is trying to contact them. We need their help to establish the whereabouts of their children so that we can go on and ask them if they would be willing to take part in this new study some 20 years on.

"On the basis of our own pilot study it is estimated that there are about 2000 to 3000 children still living in the Paisley, Renfrew and Glasgow areas."

"Our task is to try and find them." Dr Watt added: "Despite all the advances in molecular biology, a huge limiting factor in understanding major diseases is the problem of finding populations which are suitable to study. "There is probably nowhere else in the world just now where it is possible to carry out a study of the type that we propose.

"It would take other researchers 20 years to establish a similar opportunity to the one which exists at present in Paisley and Renfrew."

Between 1972 and 1976 when the original study was carried out 80 per cent of the population in Paisley and Renfrew took part. Measurements of blood pressure, cholesterol, glucose, height, weight and lung function were all taken.

It is the only study of cardiorespiratory disease and risks whose results can be applied directly to health problems of people in the West of Scotland.

Dr Watt said: "The results have been very useful in explaining why there is so much heart disease and cancer in this part of the world. What we want to look at now is why some families suffer from these diseases more than others."

"The only people who can help us today with the vital information we need are the children of the couples involved in the original study."

If you know where they are now you can contact the research team on 041-9 46-7120 extension 1446 for more information.

MIDSPAN FAMILY STUDY



1040 sons and 1298 daughters from 1477 families

Aged 30-59 and living locally in 1996

Response rates : 72% for individuals 84% for families



SIGNIFICANCE OF THE MIDSPAN STUDIES ?

COMPARATIVE OUTCOMES – 20 YEAR MORTALITY RATES

| | Renfrew Paisley | Collaborative | Whitehall |
|-------------|--------------------|---------------|-----------|
| CHD | 16.8 | 11.5 | 10.6 |
| Stroke | 5.1 | 4.5 | 2.9 |
| Respiratory | 5.3 | 3.5 | 3.7 |
| Ca Lung | 6.5 | 3.1 | 2.4 |
| All causes | 51.2 | 35.5 | 32.2 |

RELATIVE RATE OF ALL CAUSE MORTALITY FOR WEST OF SCOTLAND STUDIES COMPARED WITH THE WHITEHALL STUDY

| ADJUSTED FOR | COLLABORATIVE | RENFREW PAISLEY |
|---|--------------------|--------------------|
| Age | 1.28 (1.21 – 1.36) | 1.66 (1.59 – 1.73) |
| Age, height, FEV ₁ socio-economic status and Cardio-respiratory symptoms | 0.97 (0.91 – 1.03) | 1.13 (1.07 – 1.20) |

WHAT'S NEXT ?

Cardiovascular disease

Cancer and smoking

Respiratory impairment

Carole Hart David Hole Mark Upton