## Celebrating 30 years of the MIDSPAN Studies



## Uncle Nomman and

 other stereotypes Alex McConnachie
## Who is "Uncle Norman"?

- The stereotype who
- leads an overtly unhealthy lifestyle

口 smoking, drinking, bad diet, no exercise

- lives to a ripe old age
- Undermines public health messages


## "The Last Person"

$\square$ Another stereotype

- leads an exemplary lifestyle
- non smoker, healthy eater, fit
- sudden cardiac death
- When your time's up...


## MIDSPAN

- Renfrew / Paisley
- large sample of men
- 45-64 years
- long term mortality follow-up
- Can we find
- Uncle Norman?
- The Last Person?


## Visible Risk

## - Smoking \& BMI

- "Low visible risk"
- never smoker, <25 kg/m²

■ "High visible risk"
$\square \geq 20$ cigarettes per day, $\geq 30 \mathrm{~kg} / \mathrm{m}^{2}$

Visible Risk

Low Intermediate

337
N
N

Survived to Age 70
292
$(86.6 \%)$

| 12 | 692 | 44 |
| :---: | :---: | :---: |
| $(3.6 \%)$ | $(12.5 \%)$ | $(22.8 \%)$ |

Died from other causes
Died from CHD

| 33 | 1005 | 42 |
| :---: | :---: | :---: |
| $(9.8 \%)$ | $(18.1 \%)$ | $(21.8 \%)$ |

## Other risk factors

- Use men at intermediate visible risk - develop models for CHD death $<70$ years
- exclude non-CHD deaths
- Apply to high and low visible risk men
- do less visible risk factors explain these anomalies?


## Modelling

- Model 1
- smoking, BMI
- Model 2
- smoking, BMI, age, social class, area deprivation, height, SBP, DBP, cholesterol, \%predicted $\mathrm{FEV}_{1}$, Rose angina, prolonged chest pain, diabetes, previous stroke, ECG evidence of MI or ischaemia


## Predicted Risk

$\left.\begin{array}{c}50 \% \\ 20 \% \\ 10 \% \\ \\ \\ \\ 1 \% \\ \\ \\ \\ 0.1 \%\end{array}\right]$
$\stackrel{\rightharpoonup}{\text { Survivor }} \quad$ CHD Death
Low visible risk
$\stackrel{\downarrow}{\text { Survivor CHD Death }}$
High visible risk

Predicted Risk


The Last Person


Uncle Norman


High visible risk

## Model 1 (smoking \& BMI)

Predicted Risk


Predicted Risk

Survivor CHD Death
High visible risk

## Model 2 (fully adjusted)



## Conclusion

- Visible risk has dramatic effect on CHD mortality before 70 years
- $23 \%$ in high visible risk
- 4\% in low visible risk
- Uncle Norman is uncommon
- < 2\%
$\square$ The Last Person is rare
- $<0.2 \%$


## Conclusion

- Uncle Norman and The Last Person are often linked with other risk factors
■ 10 / 12 ( 83\%) Last Persons at higher risk
■ 81 / 107 (76\%) Uncle Normans at lower risk
- Public health messages should recognise these stereotypes within the lay perception of CHD risk

McConnachie A, Hunt K, Emslie C, Hart CL, Watt GCM (2001).
"Unwarranted survivals" and "anomalous deaths" from coronary heart disease?: prospective general population survey.

BMJ; 323: 1487-1491.

