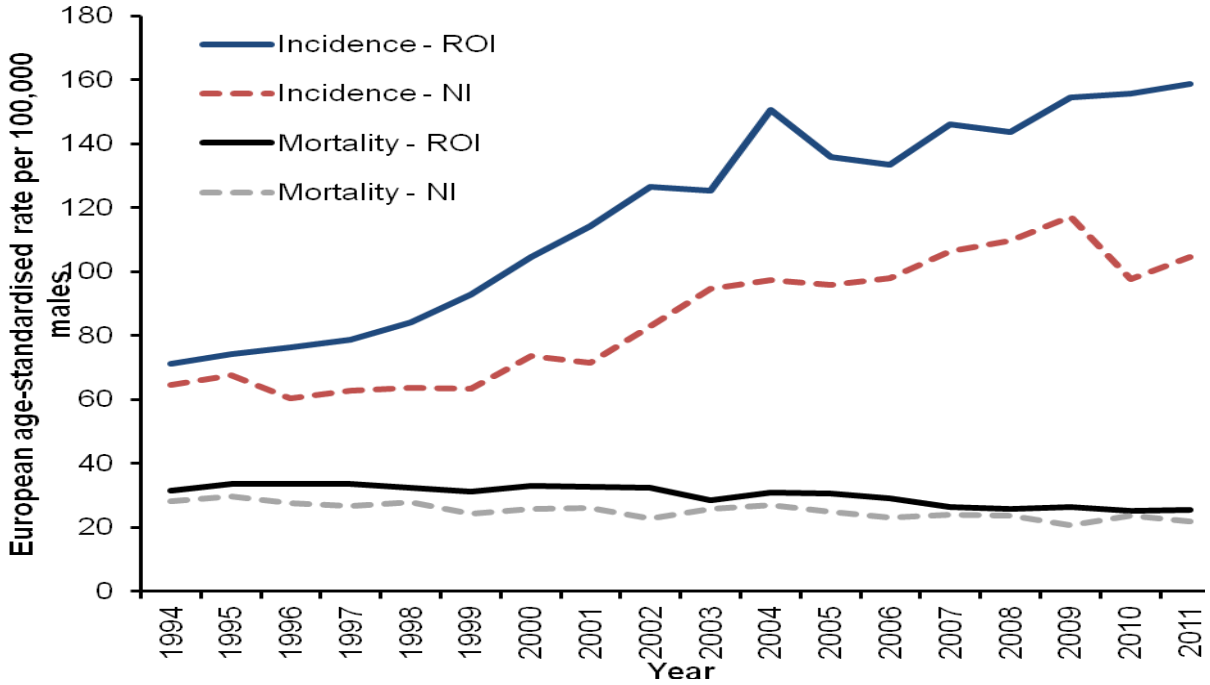
Effect of prostate cancer Investigation and treatment intensity on reported long term physical condition and health related quality of life: a two country study on the island of Ireland

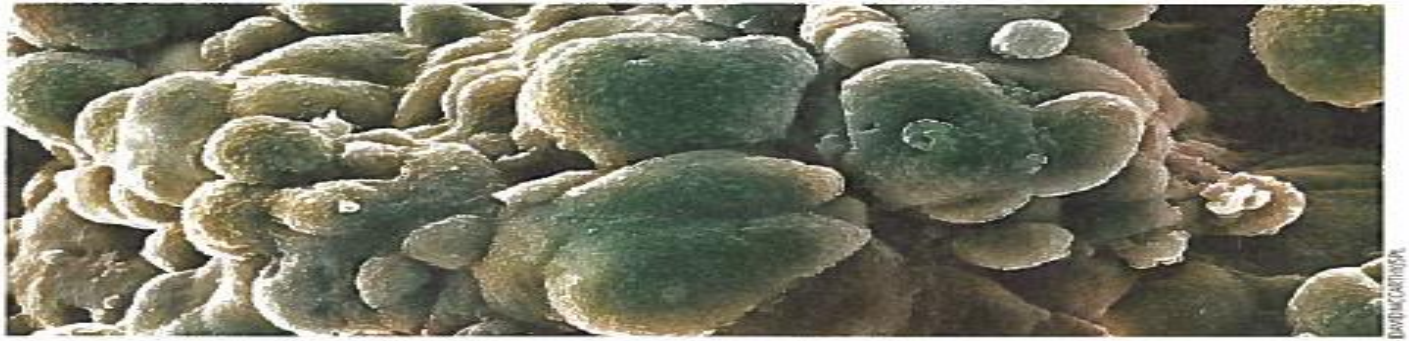
Anna Gavin, Linda Sharp, David Donnelly, Conan Donnelly, Frances J Drummond, Eileen Morgan, Gerard J Gormley

Why Ireland ?

- Populations have similar lifestyle, ethnic and genetic makeup, different health systems, good cancer registries
- PSA testing rose 23% per annum 1993 – 2005 in ROI (NI 9.7%)
- Since 1994, when incidence rates were similar, Prostate cancer ASRi has risen 222% in ROI compared to 161% in NI
- Prostate cancer patients in ROI younger, more early stage disease

Trends in prostate cancer incidence and mortality European age-standardised rates





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Offer men in 40s access to PSA test

Clinicians should consider offering men in their 40s the prostate specific antigen (PSA) test if the men have concerns about prostate cancer or are at higher than average risk of getting the disease, new guidance recommends. And GPs have been given an improved Public Health England prostate cancer pack to help them discuss the PSA test with their male patients.

Currently around 47 000 men have a diagnosis of prostate cancer in the United Kingdom, and about 11 000 die from the disease every year. Men are at higher risk if they have a family history of prostate cancer, are of black ethnic origin, or are overweight or obese.

On 29 March the charity Prostate Cancer UK published guidance on the PSA test, which has the backing of the Royal College of General Practitioners and the British Association of Urological Surgeons.

Under current Public Health England rules, any man over 50 in the UK has the right to a PSA test if he requests it and considers the implications with his GP. However, the charity said that, in men at higher than average risk of the disease, this could be too late.

It convened a group of doctors, nurses, consultants, and professional bodies to agree recommendations for using the PSA test more effectively. The new recommendations—called the 13 consensus statements—said that healthcare professionals should discuss the PSA test with asymptomatic men from age 45 if they are at higher than average risk of the disease and that GPs should explore using the PSA test to provide a "baseline" for men in their 40s who are concerned about prostate cancer, to work out their risk of getting prostate cancer later in life.

Angela Culhane, Prostate Cancer UK's chief executive, said, "It's been confusing for men. The PSA test is controversial and notoriously imprecise, but it's the best thing we've got, and it must be made to work better on the front line.

"This expert guidance plugs gaps in the official rules and brings detail and clarity."

Public Health England's updated pack contained revised information to help GPs give "clear and balanced guidance" to asymptomatic men on the potential benefits and risks of having the test.

It said that the PSA test is not accurate enough to serve as the basis of a national screening programme.

Adrian O'Dowd, London

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Prostate cancer cells. A PSA test over the age of 50 may be too late for some men, said Prostate Cancer UK

NEWS ONLINE

- Access to specialist palliative care is still inadequate, audit finds
- Reminder letters improve uptake of bowel screening tests
- Undercount of concussions skewed NFL research, investigation alleges

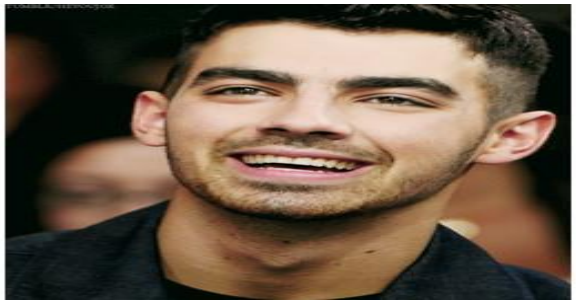
AIM

- To investigate, at population level, effects on men's health and wellbeing of different intensities of Prostate cancer investigation and treatment

Method

- Postal questionnaires sent to Prostate Cancer survivors 2-18 years post treatment identified from population-based cancer registries on the island of Ireland
- Seeking information about impotence, urinary incontinence, bowel problems, libido loss, gynaecomastia and hot flashes/sweats), Health Related Quality of Life (HRQoL; using EQ-5D 5L, EORTC QLQ-C30) and psychological wellbeing (using DASS-21)

3,348 (54%) men responded

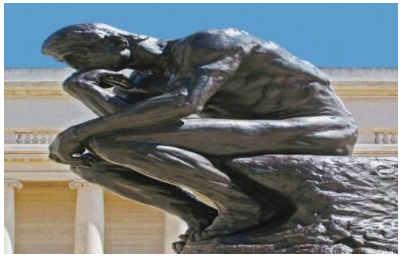


ROI n=2567

N. Ireland n= 781

- ROI – younger - 65 vs 67 years
- Asymptomatic presentation (66% vs 41%)
- Without comorbidities (45% vs 58%)
- With early disease (56%, 35%) and
- Less often with late disease (16%, 36%)
- Current receipt of Androgen Deprivation Therapy (ADT) was 18% in NI and 9% in ROI

Analysis



- Survivors were analysed separately for ROI and NI, for categories ‘late disease’ defined as stage III/IV and any Gleason Grade (GG) at diagnosis, and ‘early disease’ defined as stage I/II and GG 2-7
- Survey responses were weighted by age, jurisdiction and time since diagnosis
- Between country differences were investigated using z-tests, chi-square tests, Anova and univariate and multivariate logistic and linear regression
- Significance was at the 5% level, with the Bonferroni correction to compensate for multiple comparisons

Analysis continued

- Multivariate regression models*
- 1st adjusted for age at questionnaire completion, number of comorbidities at diagnosis, time since diagnosis and method of diagnosis
- 2nd then added treatments (RP, EBRT, BT, ADT) since treatment utilisation differs between ROI and NI
- Records with missing treatment or method of diagnosis were dropped from all models (n=60)

*logistic for physical symptoms and linear for health utility, HRQoL and psychological wellbeing

RESULTS - Model 2 Physical effects (adjusted for socio-demographic factors, clinical variables and treatment)

- Similar levels for NI and ROI were recorded for current incontinence (weighted overall prevalence=16% early and late)
- and current impotence (56% in early disease, 67% in late disease)

RESULTS - Early disease (model 2)

- NI men reported significantly higher levels of:
  - Bowel problems (ROI=12% NI=21%, OR 1.8, CI 1.26 - 2.56, P=0.001)
  - Pain (QLQ C30 19.4 NI vs 11.1 ROI, risk estimate 5.829, CI. 2.349-9.308, p=0.001)
- Similar levels for NI and ROI were recorded for current incontinence (weighted overall prevalence=16%) and impotence (56%)

RESULTS - Late disease (model 2)

- NI men reported higher levels of:
  - breast changes (23% vs 9%, OR 2.33 CI 1.41- 3.73 p<0.001)
  - hot flashes (41% vs 19%, OR 2.30 CI 1.55- 3.51, p=0.001)
- These findings were not present when ADT patients were analysed separately (note ADT 18% in NI and 9% in ROI)
- ROI men reported more:
  - financial difficulties (7.9 NI vs 10.4 ROI, risk estimate -8.629, CI 12.770-4.488,p=0.0001)
- Similar levels for NI and ROI were recorded for current incontinence (16%) and current impotence (67%)

Early or Late disease

- There were no significant differences in depression, anxiety, distress or index ED-5D score between ROI and NI, in either univariate or adjusted analyses.

Other group

- N= 959 (29% overall) in the ‘other’ group, representing an almost identical percentage of respondents from ROI (28%) and NI (29%).
- There were no significant difference in the other group between NI and ROI

Conclusion

- In this population-based study, following twenty years of higher levels of prostate cancer detection in ROI than NI, health outcomes among Prostate Cancer survivors differed little between countries. However the higher intensity of investigation and treatment has resulted in many additional men with ongoing prostate cancer-related physical symptoms in ROI, a risk for all areas with higher levels of testing

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Questions?