ECRS workshop on social inequalities

Cancer and health, disease, work capacity and sickness absence

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Social inequality

Studied in many disciplines;

in the last decades also in medicine
Social inequality

Measured using e.g.:

- Economy
- Poverty
- Education
- Social network, living area
- Type of job
- Access to information, care, etc
- Family situation
Social inequality

Can affect:
Risk factors
Incidence
Treatment
Rehabilitation
Outcome
Mortality
Three examples on results related to social inequality from the Strategic Review of Health Inequalities in England Post-2010 (The Marmot Review)

http://www.marmotreview.org
Figure 8 Mortality of men in England and Wales in 1981–92, by social class and employment status at the 1981 Census

Standardised Mortality Rate

Employed in 1981

Unemployed in 1981

Social Class

Source: Office for National Statistics
Longitudinal Study\textsuperscript{19}
Figure 10 Populations living in areas with, in relative terms, the least favourable environmental conditions, 2001–6

Environmental conditions: river water quality, air quality, green space, habitat favourable to biodiversity, flood risk, litter, detritus, housing conditions, road accidents, regulate sites (e.g. landfill)

Source: Department for Environment, Food and Rural Affairs
Figure 11: Prevalence of obesity (>95th centile), by region and deprivation quintile, children aged 10–11 years, 2007/8

Prevalence of obesity

Region of residence

Quintile 1 (least deprived)
Quintile 2
Quintile 3
Quintile 4
Quintile 5 (most deprived)

Source: National Obesity Observatory, based on National Child Measurement Programme²⁴
Concepts:
Health
morbidity
work capacity
sickness absence
Health

Medin & Alexanderson, Studentlitteratur 2000
Relation health-disease: 3 approaches

- As contrasts:
  - Health
  - Disease

- As opposites:
  - Health
  - Disease

- As different dimensions:
  - Wellbeing
  - Ability to reach vital goals
  - Meaning
Morbidity
Illness

Disease

Sickness

Sickness absence
Sick-leave data used as a measure of:

1. Morbidity
2. Consequences of morbidity
3. Risk factor/exposure
Large social inequalities in mortality
Large social inequalities in morbidity

Extremely large social inequality in sick leave - that is, in social consequences of morbidity
Main sick-leave diagnoses:

• Musculoskeletal
• Mental

Cancer a small group
So why study breast cancer?
Difficult to differentiate: consequences from being SA due to a disease from the consequences of that disease

Somewhat easier if no long-term symptoms of the disease before the SA
Breast cancer (BC):

• Most women (88%) survive
• Half are of working ages
• International agreement regarding diagnoses and treatment procedures
A prospective cohort study

Aim: To gain knowledge about SA and life situation during the first 2 years after BC

A 2-year prospective cohort study

Inclusion criteria
- breast cancer surgery within 2 months
- 20-63 years
- living in Stockholm
- literate in Swedish

Exclusion criteria
- known distant metastasis
- need for preoperative treatment
- previous breast cancer
Inclusion 2007-2009

- Patients included consecutively at 1st consultation after surgery
- 923 invited
- 749 (81%) answered the 1st questionnaire
A 2-year prospective cohort study

6 Questionnaires

Register data: sick leave & disability pension, +2 years <T₀

Data from medical files

Mortality

Cancer register data

Interviews
Comprehensive questionnaire on

- Demographics
- QoL, life satisfaction
- Health, illness, disease, sickness
- Paid and unpaid work
- Life style
- Coping
- Support, abuse
- Contacts (healthcare, social insurance, work, alternative healthcare)
Some results

- Most women worked at diagnosis (86%)
- Of these, most worked full-time (86%)
The majority (58%) rated their current health as good.

Most rated their health as the same (52%) or better (7%) than six months ago.
- 56% were SA when answering the questionnaire (77% for full-time and 66% for ≤1 month)

- Some were SA with other diagnoses than BC
Factors associated with SA in first period after surgery:

- low self-rated current health
- worse health after diagnosis
- a strenuous work posture
Factors associated with SA in first period after surgery:

- low self-rated current health
- worse health after diagnosis
- a strenuous work posture

No association with:

- educational level or co-morbidity
Results somewhat inconsistent with results from studies with data later after surgery

Indicate that knowledge is needed during different phases of the breast cancer trajectory
Thank you for your attention!

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