Early Intervention in Psychosis; background

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OUTLINE

Early Intervention

concepts

aims
early intervention in somatic medicine

equals treatment of pre-symptomatic illness

hypertension; no symptoms, but objective signs of illness

symptoms and signs are at different epistemological levels of description
diabetes

subjective symptoms such as thirst, increased urine-production and blurred vision

objective tests confirms the diagnosis
SIGN AND SYMPTOMS

psychosis

subjective symptoms such as hallucinations, delusions or thought-disorder

no objective tests can confirm the diagnosis

description at only one epistemological level = diagnosis of pre-symptomatic illness is not possible
LEAD TIME BIAS

Advances in Diagnostic Imaging and Overestimations of Disease Prevalence and the Benefits of Therapy

William C. Black, and H. Gilbert Welch

LEAD TIME BIAS

“abnormalities can be detected well before they produce any clinical signs and symptoms”

prostata-cancer; 1% of the male population 60-70 yrs are ill

modern diagnostic techniques “detects” cancer in up to 40% of the same population = 4000% increase!

mammography increases the incidence of breast cancer from 1% to 35%

lead time bias is very important for studies of outcome
LEAD TIME BIAS

- start of process
- early diagnosis ED
- late diagnosis LD
- artefact
- ED survival time
- LD survival time
- death
- time
LEAD TIME BIAS

Black and Welch's critique is however, based upon the idea of diagnosis of pre-symptomatic illness.

What relevance does it have for ED of psychosis in which diagnosis of pre-symptomatic illness is impossible?
LEAD TIME BIAS

- start of psychosis
- early diagnosis ED
- late diagnosis LD
- ED time to remission
- LD time to remission
- artefact
- DUP ED
- DUP LD
- true effect of TIPS; DUP + time to remission
LEAD TIME BIAS IN PSYCHOSIS

we do not have diagnosis of pre-symptomatic illness in psychosis

time to remission is the outcome factor

lead time bias goes the other way around; the consequence is that ED leads to a longer time to remission

if this is correct; ED should not increase incidence as in somatic medicine
DUP
prodrome
treatment

onset of psychosis

TIPS
secondary prevention

TOPP
primary prevention
CONCEPTS

DUP = duration of untreated psychosis

prepsychosis

preschizophrenia

prodromal symptoms

at risk mental state

hypopsychosis
TWO AIMS

can primary prevention be achieved?

can DUP be reduced?
Marshall Arch Gen Psych 2005

Baseline
- All Symptoms (n=615)
- Depression/Anxiety (n=571)
- Disorganized Symptoms (n=136)
- Negative Symptoms (n=1401)
- Overall Functioning (n=367)
- Positive Symptoms (n=1135)
- Quality of Life (n=330)
- Social Functioning (n=248)

Correlation Coefficient (95% CI)
- Short DUP Worse
- Long DUP Worse

6 mo
- All Symptoms (n=530)
- Depression/Anxiety (n=530)
- Disorganized Symptoms (n=74)
- Negative Symptoms (n=933)
- Overall Functioning (n=684)
- Positive Symptoms (n=933)
- Quality of Life (n=74)
- Social Functioning (n=108)

Correlation Coefficient (95% CI)

12 mo
- All Symptoms (n=385)
- Depression/Anxiety (n=376)
- Negative Symptoms (n=779)
- Overall Functioning (n=287)
- Positive Symptoms (n=777)
- Quality of Life (n=403)
- Social Functioning (n=191)

Correlation Coefficient (95% CI)

24 mo
- Negative Symptoms (n=164)
- Overall Functioning (n=68)
- Positive Symptoms (n=164)
- Quality of Life (n=164)
- Social Functioning (n=55)

Correlation Coefficient (95% CI)
DUP AND OUTCOME

there seems to be a clear correlation between longer DUP and poorer outcome.

will a reduction in DUP lead to a better outcome?