The OPUS –trial: A randomised two-site trial of specialised assertive treatment versus standard treatment for patients with a first episode of psychotic illness. Five-years follow-up.

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The Danish OPUS Trial:
A two-site randomised clinical trial of assertive specialised psychiatric treatment

First episode psychosis
Five-year follow-up
• The name OPUS was taken from the music

• It means: Piece of work

• We wanted to indicate the need of coordination of different elements in psychiatric treatment

• -and that these elements play together

• We hoped to build an instrument that could play many different keys and tunes

• We conducted a pragmatic trial
A long awaited guest

- A long awaited guest who you want to feel welcome and at home during a long visit.
- A collaborator, whose insights and attitudes are decisive for the outcome.
- An individual with personal preferences that should be taken into account in the treatment to the greatest extent possible.
Specialised Assertive Intervention by OPUS team

• Assertive Community Treatment
  – (staff: patient ratio 1:10)

• Psychoeducational multi family groups

• Social skills training
The OPUS team

- Psychiatrist
- Psychiatric nurse
- Psychologist
- Social worker
- Vocational therapist
- Labour market/ educational guide
- No locksmith
Assertive Community Treatment

• Multidisciplinary team, caseload 1:10
• Team follows the patients during in- and outpatient treatment
• Flexible frequency of contact (weekly)
• Home visits
• Coordinate different institutions involved in the treatment of the patient. GP, somatic department, creditors and social services.
Can contact be established?
For instance how to respond to an unpleasant official letter
Or how to respond when neighbours complain about too much worn-out furniture placed in the corridor
Or what kind of job training will be relevant?
The OPUS Program for involving the family:

- Consequently involving families
- Workshops for relatives
- Single family sessions with crisis intervention with and/or without the patient
- McFarlanes model for psychoeducational multi-family groups, every second week for 1½ year.
- On-going possibility for contact to the patient’s primary team member
Attitudes towards relatives:

• The closest collaborating partners

• Who can be of invaluable help

• Who are very involved in relation to the patient

• A ressource that cannot be equalled
Common problems

• Medication side effects
• Drug abuse
• Job seeking
• Going to school
• Moving away from home
• Maintaining relations
• Conversation
• Parents holiday
Inclusion Criteria

Age 18–45

A diagnosis (ICD10 research criteria) of F2: schizophrenia, schizotypal disorder, delusional disorder, acute psychosis, schizoaffective psychosis or unspecific non–organic psychosis

Patients have so far not had adequate treatment, defined as 12 weeks of anti–psychotic medication
Assessments

- SCAN (Schedule for Clinical Assessment in Neuropsychiatry)
- SAPS (Schedule for Assessment of Positive Symptoms)
- SANS (Schedule for Assessment of Negative Symptoms)
- GAF (function and symptoms)
- Demographic data including educational, employment and housing status
- Lancashire Quality of life Scale
- Client Satisfaction Questionnaire
- Life Chart Schedule
- Cognitive test (only at 5 years follow-up)
Register-based follow-up

- Complete case records from all mental health services in the catchment areas
- Danish Psychiatric Central Case Register
- Cause of Death Register
- Central Civil Register (CPR)
- Statistic Denmark
- Database with all addresses for psychiatric nursing homes and staffed group homes
547 patients included and randomised

275 patients allocated to OPUS team treatment and treated for two years.

272 patients allocated to standard treatment

All patients were offered standard treatment for another three years

301 interview after five years (56%)
Patients randomised (n=547)

Allocated to ST (n=272)
Lost to follow-up (n=39):
  Refused or did not turn up (n=18)
  Moved too far away (n=4)
  Not located (n=16)

Two-year follow-up interview (n=164, 60%)
Lost to follow-up (n=45):
  Suicide (n=1)
  Refused or did not turn up (n=22)
  Moved too far away (n=10)
  Not located (n=12)

Five-year follow-up interview (n=149, 57%)
Lost to follow-up (n=56):
  Unexplained death (n=2)
  Death by accident (n=1)
  Death not causes (n=1)
  Refused or did not turn up (n=30)
  Moved too far away (n=4)
  Not located (n=18)

Allocated to OPUS (n=275)
Lost to follow-up (n=25):
  Refused or did not turn up (n=12)
  Moved too far away (n=4)
  Not located (n=9)

Two-year follow-up interview (n=205, 75%)
Lost to follow-up (n=45):
  Suicide (n=1)
  Unexplained death (n=2)
  Death by accident (n=1)
  Refused or did not turn up (n=12)
  Moved too far away (n=4)
  Not located (n=12)

Five-year follow-up interview (n=152, 57%)
Lost to follow-up (n=25):
  Suicide (n=4)
  Unexplained death (n=2)
  Refused or did not turn up (n=29)
  Moved too far away (n=5)
  Not located (n=27)

Base line

Lost (n=25):
  Refused or did not turn up (n=12)
  Moved too far away (n=4)
  Not located (n=9)

Lost to follow-up (n=78):
  Refused or did not turn up (n=18)
  Moved too far away (n=5)
  Not located (n=16)
Satisfaction with treatment 2 y

Would you recommend this treatment to a friend?

- Definitely
- I think so
- I don't think so
- Definitely not

OPUS team
Standard
Drop-out

No out-patient treatment

Petersen et al, BMJ 2005
Psychotic dimension
Mean values

OPUS Standard

P=0.02 P=0.02 P=0.31

Bertelsen et al, Arch Gen Psych 2008
Negative dimension
Mean values

![Bar graph showing mean values for Negative dimension over time (Baseline, 1y, 2y, 5y) with OPUS and Standard treatments.]

- Baseline: P<0.001
- 1y: P<0.001
- 2y: P=0.7

Bertelsen et al, Arch Gen Psych 2008
Substance abuse

Comorbid substance abuse (%)

OPUS team Standard

P = 0.03  P = 0.04  P = 0.49

Baseline 1 y 2 y 5 y

Substance abuse
Use of beddays during and after the OPUS-trial

Bertelsen et al, Arch Gen Psych 2008
Use of supported housing
Living in an institution

Supported housing 2y
Supported housing 5y
Use of supported housing
Living in an institution

Days

First two years

Next three years

OPUS
Standard
Prognosis for patients with first episode psychosis after two and five years

- **Recovery:** GAF-F>60, remission and working or studying
- **Remission of psychotic and negative symptoms**
- **Non-remission or not working or studying**
- **Institutionalized:** Living in supported housing or hospitalized more than 6 month last year
Survival in the first 5 years

Civil registration system: 547 patients RR 0.6 (0.2-1.6), P=0.3

Power calculation: 1522 patients in each treatment condition necessary to detect a difference between 2% and 4% mortality

Probabilty of death (all causes) in the two treatment groups as a function of time (days)
Suicides in the first 5 years

Probability of death by suicide in the two treatment groups as a function of time (days)

Bertelsen et al, Br J Psych, 2007
The Danish OPUS Trial

Conclusion:

• Psychotic and negative symptoms and substance abuse was significantly better after two years of intervention.

• Difference disappeared when patients in OPUS treatment were transferred to standard treatment after two years.
The Danish OPUS Trial

Conclusion:

• Significant more satisfaction with treatment in OPUS-team treated group after two-years
• Significantly better adherence in OPUS-team treated group
• Low dose strategy succesfully implemented in OPUS (20 percent lower dosage antipsychotic medication)
The Danish OPUS Trial

Conclusion:

• Number of bed days was reduced with 22 percent in OPUS team group compared with standard treatment
• Even after the end of the experimental period, patients in integrated treatment still had a lower use of bed days (17 percent lower)
• Fewer in the OPUS-treated group stayed in supported housing after five years
• OPUS treatment was cheaper and better than standard treatment
The Danish OPUS Trial

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• OPUS treatment was cheaper and better than standard treatment.

OPUS is cheaper and better.
Mean saving: 39 bed days (20%) and 50 days in supported housing in the five year period.
Painkiller or driving licence

• Training effect - driving licence
  Psycho educative approach
  • Warning signs
  • Effect of medication
  • Symptom management
  Training social skills

• Compensation - painkiller
  – Assertive approach
  – Supportive
The relatives

• Effect after one year specialised assertive treatment
Relatives stress-score, one-year
Social Behaviour Assessment Schedule

OPUS vs ST:
P = 0.04

Jeppesen,
Br J Psych, 2005,
Vol 87, Suppl 48
Knowledge about schizophrenia, relatives, one-year follow-up

OPUS vs ST: P = 0.02
Satisfaction with treatment, relatives, one-year follow-up

T-test
mean diff = 4.26 (2.7-5.9)
p<0.001
“Did the treatment help you to a better understanding of your mentally ill relative?”
Deinstitutionalisation revisited

Should the most severely ill among first episode psychosis patients be treated with hospital based rehabilitation?
578 patients included in the OPUS-trial

Randomisation 1
94 patients randomised

Hospital-based Rehabilitation; N=31
OPUS treatment N=34
Standard treatment N=29

275 patients allocated to
OPUS treatment; N=34 + N=241

Randomisation 2
484 patients randomised

OPUS treatment; N=241
Standard treatment N=243

272 patients allocated to
Standard treatment N=29 + N=243
Number of days in psychiatric department or supported housing during five years for first episode psychotic patients randomised to OPUS, standard treatment or hospital-based rehabilitation.
Pragmatic randomised trials:

• general unspecific services

vs

• modern specialised services
12 OPUS/
Early intervention teams
The OPUS Trial

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Thank you for your attention