

Psychiatric Emergency (Services): the Belgian experience

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Mental Health Care: the Flemish context


- 'Easy' access to mental health care
 - Principle of stepped care only in theory
- Inpatient care:
 - 67 (113) General Hospitals
 - 39 (44) Psychiatric Hospitals
 - 152 psychiatric beds/100.000 inhabitants
- Outpatient care:
 - 21 Mental Health Centres
 - In general & psychiatric hospitals
 - + private practices

Mental Health Care: the Flemish context



Crisis in acute care: poor physical environments, unsafe environment,
limited opportunities for activity?

Emergency psychiatry: the Bruges situation – practice

- 
- 1993: official pilot projects PES (Brussel, Antwerpen, Charleroi)
 - 1997: unofficial pilot projects PES (Brugge, Kortrijk, Gent, Leuven, Genk, ...)
 - 2002: official pilot projects for substance-related disorders
 - + psychiatric intensive care units, initiatives for better assessment and management of patients at risk of suicide in EDs, psychiatric home treatment teams, early detection & intervention of psychosis teams



“Naar een betere geestelijke gezondheidszorg
door de realisatie van zorgcircuits en
zorgnetwerken”

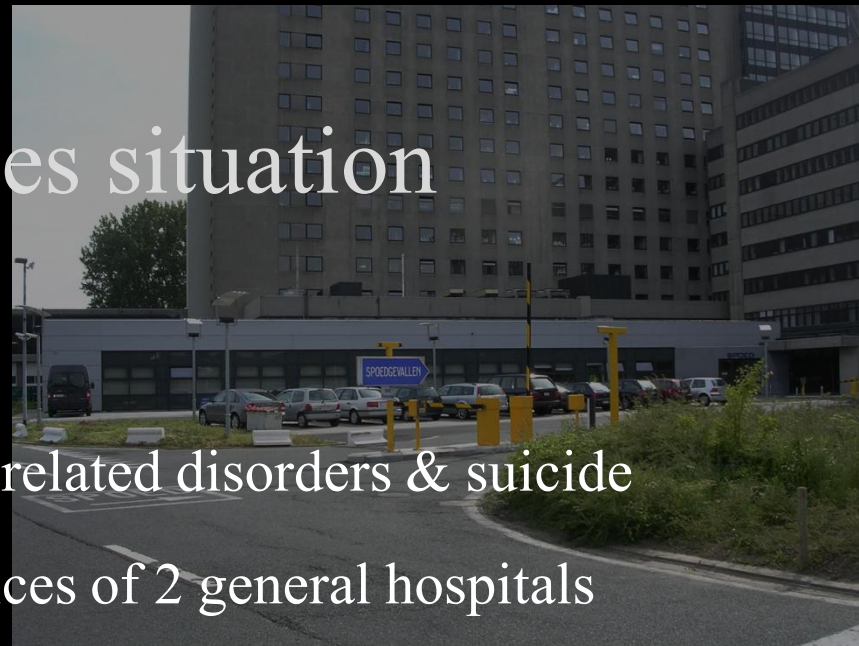
Functie 2a: “Ambulante intensieve behandelteams voor acute
psychische” problemen

Special interest in the introduction of CRTs, reorganization of emergency
psychiatry

The Belgian/Flemish context



PES – the Bruges situation



- Organization in persons:
 - Multidisciplinary team
 - Case management substance related disorders & suicide attempt
 - Joint venture of psychiatric services of 2 general hospitals
 - Collaboration with GP & ED
 - Collaboration with broader mental health system (e.g. PICU)

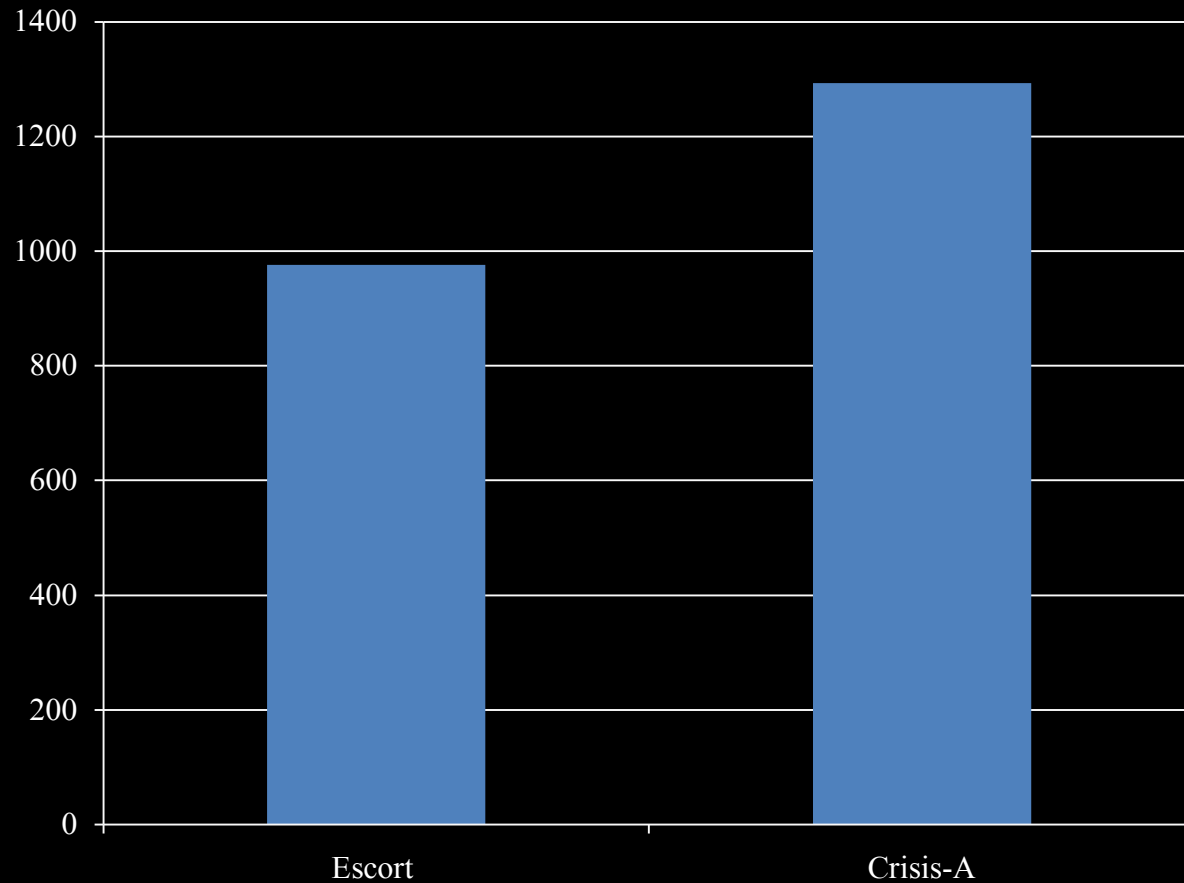
- Organization in space:
 - ED of general hospital
 - 10 beds

- Organization in time:
 - 24 hours/day, seven days/week
 - 1-2 days LOS (3-5 days)

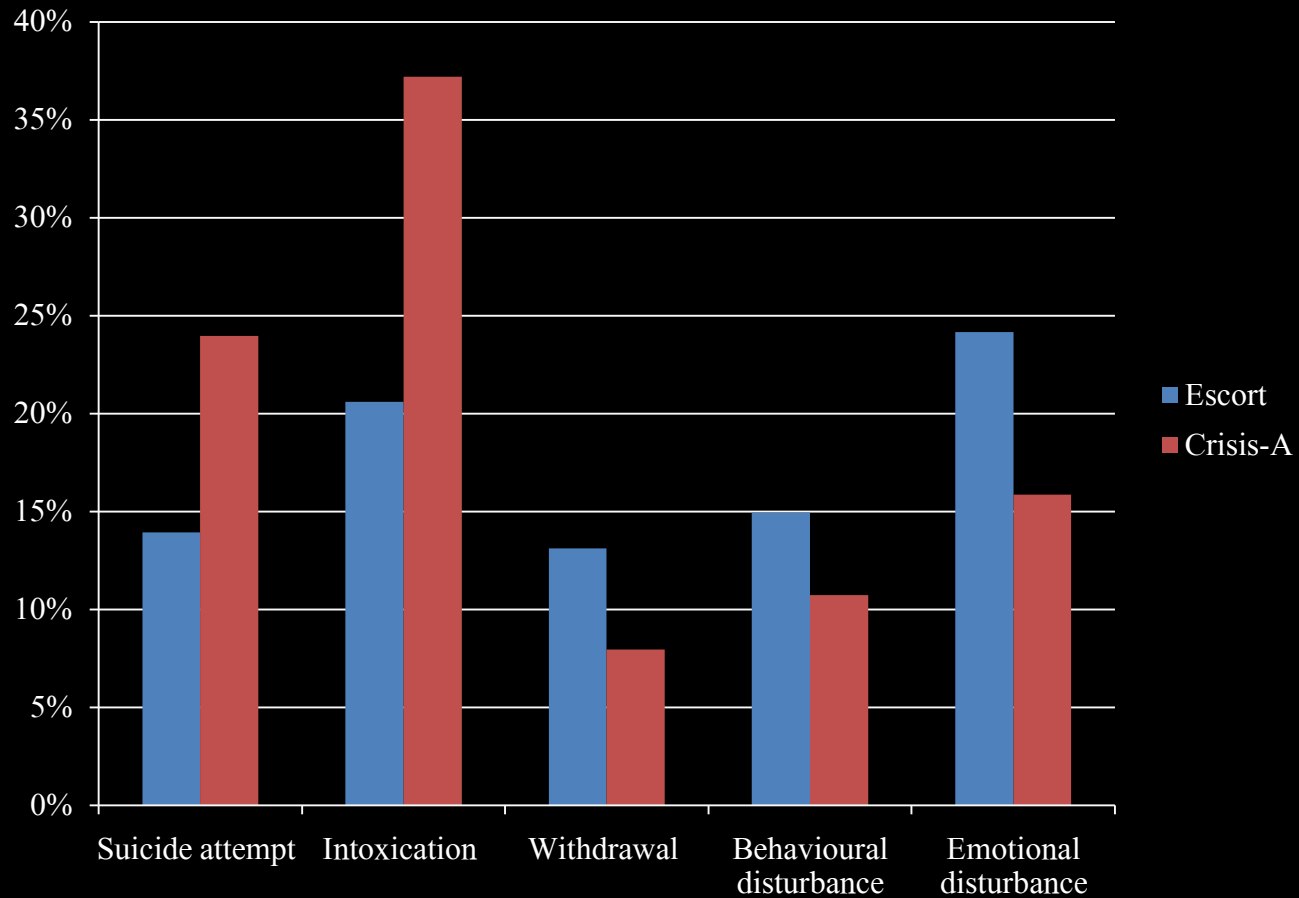
PES: the Bruges situation

- 2400 patients with mental health problems evaluated in the ED
- 1412 patients (60%) admitted in the PES
- \pm 50% of patients are without real referral or referred by their family/friends
- Acute intoxication (31%), suicidality (20%), emotional disturbances (19%), disturbed behaviour (11%)
- Substance related disorders (39%), mood disorders (17%), psychotic disorders (11%);, adjustment disorders (10%) Bruffaerts et al., 2008

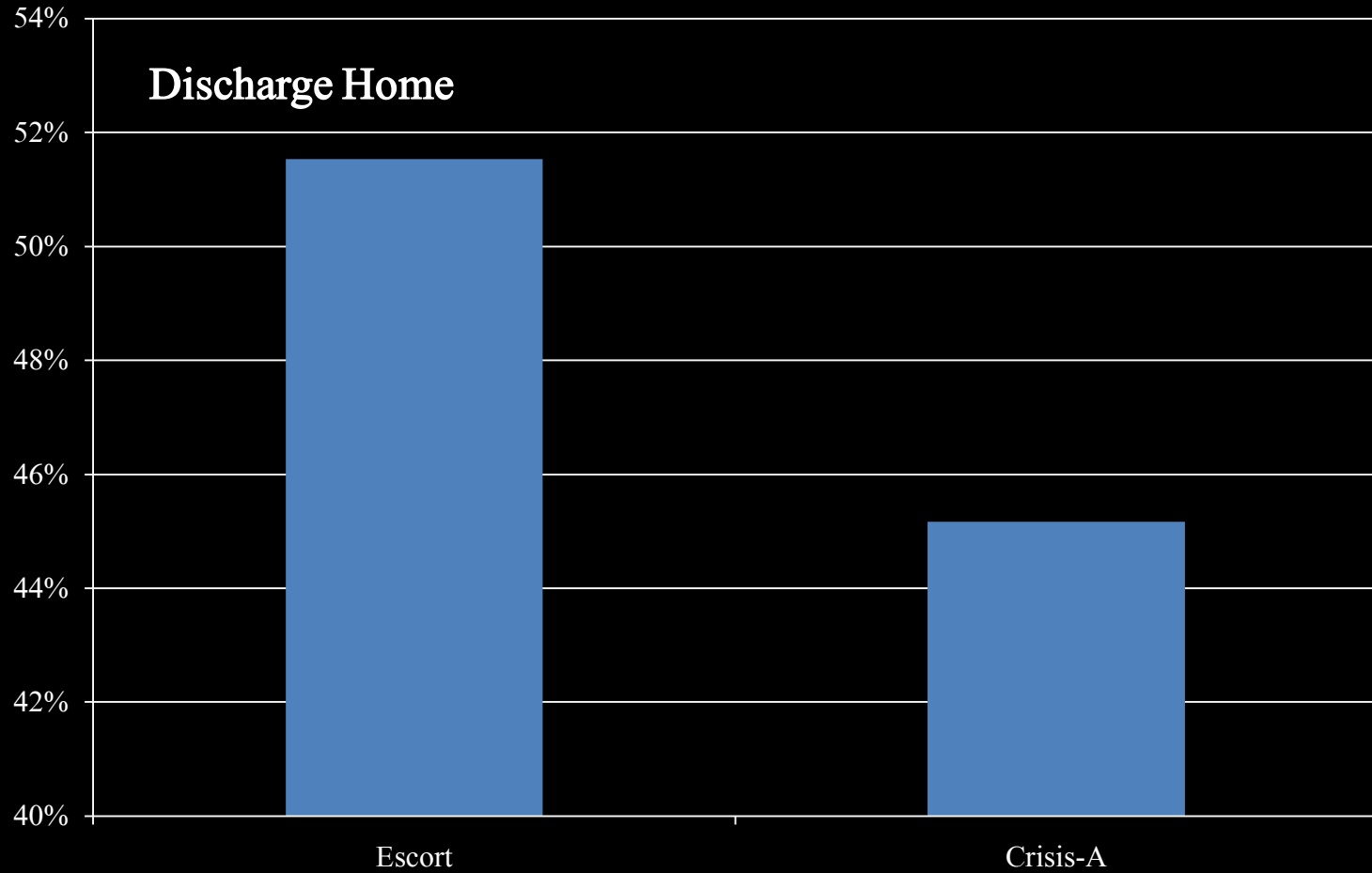
PES: the Bruges situation



PES: the Bruges situation



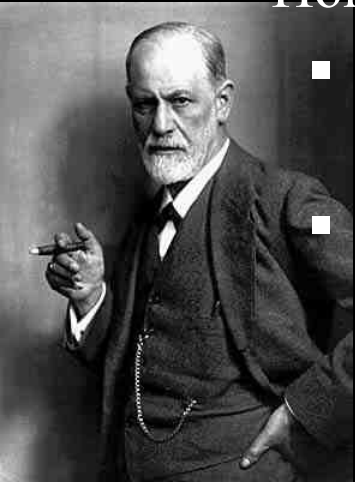
PES: the Bruges situation



Emergency psychiatry: a brief history



- Emergency services of larger General Hospitals (high percentage of psychiatric cases, presence of psychiatric staff, ...)
- Aftercare in Psychiatric Hospitals
- Community mental health movement
- Crisis intervention theory: primary prevention of psychiatric disorders
- Horizontal & vertical organization:
 - Consultation model, PES, crisis hospitalisation, mobile teams, ...
 - Substance related disorders, self harm, ...



Psychiatric emergency: what's in a name?

- An emergency is a situation that requires immediate attention to avert a serious outcome. Mental health emergencies range from situations where a patient is at risk because of intense personal distress, suicidal intentions, or self neglect to those where a patient places others at risk Atakan, 1997
- Acute situations of sufficient gravity to warrant immediate assessment and treatment Breslow, 2002
- Any behavior that cannot be dealt with as rapidly as needed by the ordinary mental health system, social service, or criminal justice system in a community Hillard, 1994
- Any disorder of mood, thought and/or behaviour which arises suddenly and requires prompt action and for which a patient presents to a health care facility Oyewumi, 1992
- Situations in which clinical and social problems and associated risks are severe enough for admission in an acute psychiatric ward to be considered a potentially appropriate response Brimblecombe, 2001

Psychiatric Emergency Services: what's in a name

- “PES’s role is to reconcile the complex needs of the local population with the traditional organizational structure of local treatment options” Bassuk and Gerson, 1979
- “PES are designed to respond to psychiatric emergencies as they arise” Breslow, 2002
- Goals of PES Breslow, 2002
 - Timely and ‘easy access’ rendering of psychiatric care
 - Safety/stabilization and assessment
 - Referral & continuity of care



"Age? You mean now or when we first sat down?"

Fortress model

- Limited number of beds/staff versus high number of patients
- Focus on dangerousness and severity of symptoms, no diagnostic/therapeutic subtleties
- Focus on the resilience of patients/environment
- Medicolegal issues
- Predictors of hospitalization
- Coercive measures
 - Restraint (chemical, physical), involuntary treatment

Severity of Psychiatric Illness Scale

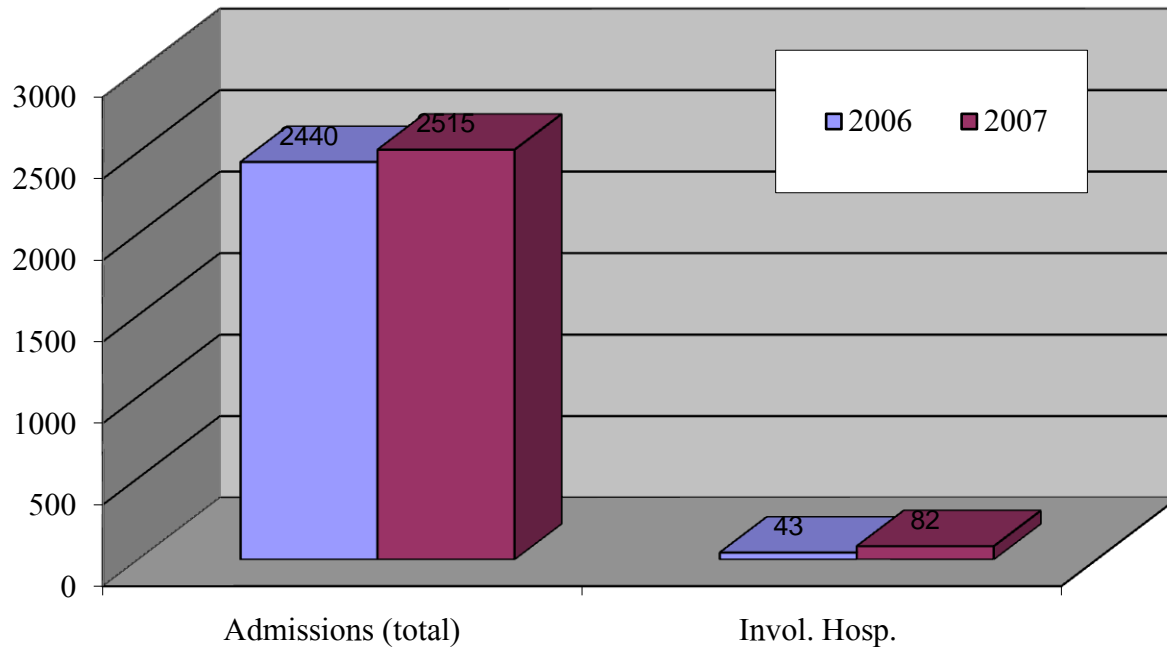
- **Level of care**
 - **Suicide risk**
 - **Danger to others**
 - **Severity of psychiatric symptoms**
 - **Difficulty with self-care**
 - **Complications to illness**
 - **Substance abuse**
 - **Medical complications**
 - **Family disruption**
 - **Vocational impairment**
 - **Complications to treatment**
 - **Residential instability**
 - **Motivation for treatment**
 - **Medication compliance**
 - **Knowledge of illness**
 - **Family involvement**
 - **Persistence of symptoms**
- **Score: 0-3 & unknown**
 - **Total raw score**
 - **Complexity indicator**
 - **Prediction model**

Fortress model -some limitations

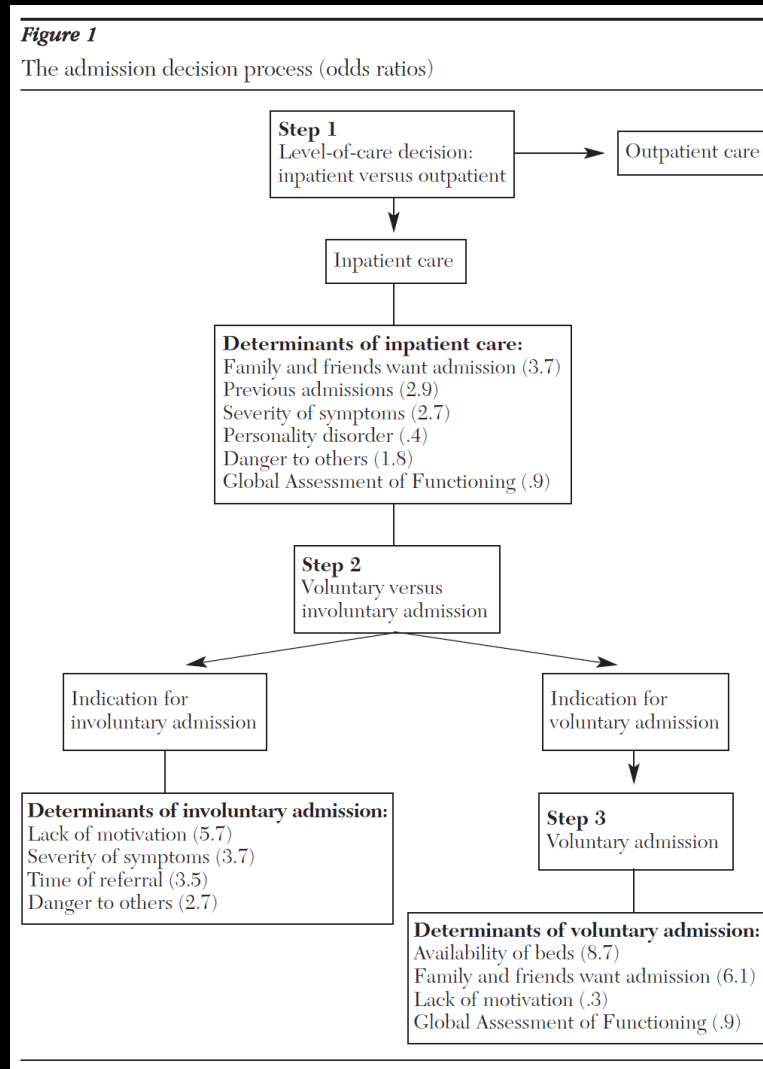
- Applies to a limited number of patients
- Has limited predictive value
- Questionable severity of illness
- Missed opportunities for most patients

... applies to a limited number of patients ...

Involuntary hospitalisation PES



... has limited predictive value ...



... has limited predictive value ...

Test	Outcome		
	Suicide	No suicide	
Positive	a	b	a + b
Negative	c	d	c + d
	a + c	b + d	
Sensitivity = $a/a + c$		PPV = $a/a + b$	
Specificity = $d/b + d$		NPV = $d/c + d$	

Test	Outcome		
	Suicide	No suicide	
Positief	8	192	200
Negatief	2	798	800
	10	990	
Sensitivity = 80%		PPV = 4%	
Specificity = 80%		NPV = 99,8%	



- 1000 admissions after suicide attempt
- 1% risk of suicide after 1 year
- Test with sensitivity & specificity = 80%

... severity of illness ...

- Diagnosis
- Type of symptoms?
- Number of symptoms?
- Duration of symptoms?
- Functioning?
- Quality of life?
- Objective or subjective?



... missed opportunities ...

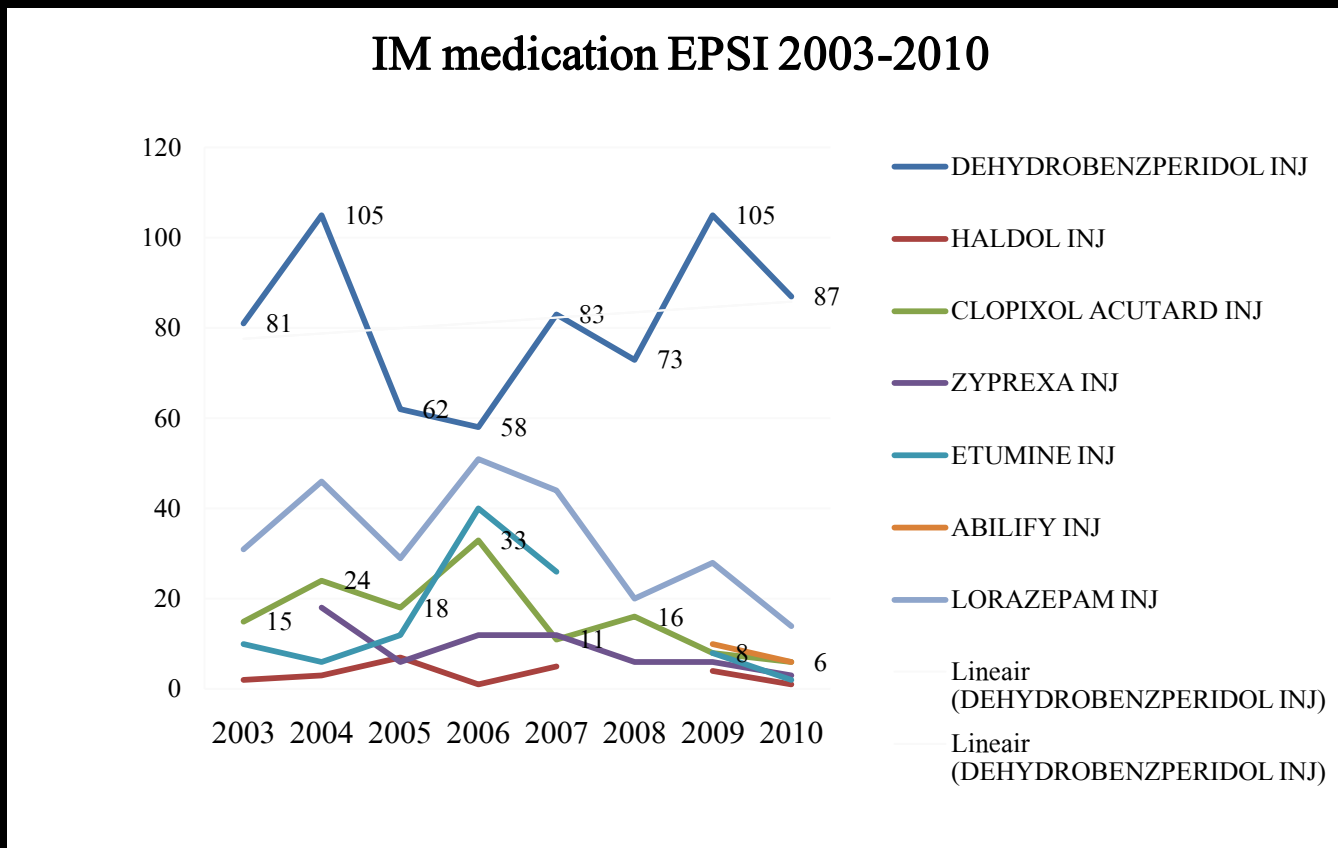
- High prevalence of mental disorders (1-y prevalence 30.5%; severe 6.3 %, moderate 13.5 %, mild 10.8 %) Kessler et al. 2005
- Delayed onset of action of mental health care: 6-8 years gap between initial symptoms and access to care Wang, 2005
- High prevalence of getting no treatment: 35.5-50.3 % of patients with severe psychiatric disorders (1-y prevalence) gets no treatment WHO, 2005

Gatekeeper/treatment model

- Extended medical/psychiatric/psychosocial evaluation
 - Mental state, psychiatric diagnosis, functioning, substance abuse, history, context, patient preferences, treatment options, ... (Dawes, 1995)
 - Multidisciplinary approach
- Appropriate referral – continuity of care at the least restrictive level
- Indirect evidence of efficacy (clinical outcome, adherence to treatment)
- Rating scales
 - HSCL, BPRS
- Rapid tranquilization

... rapid tranquilization ...

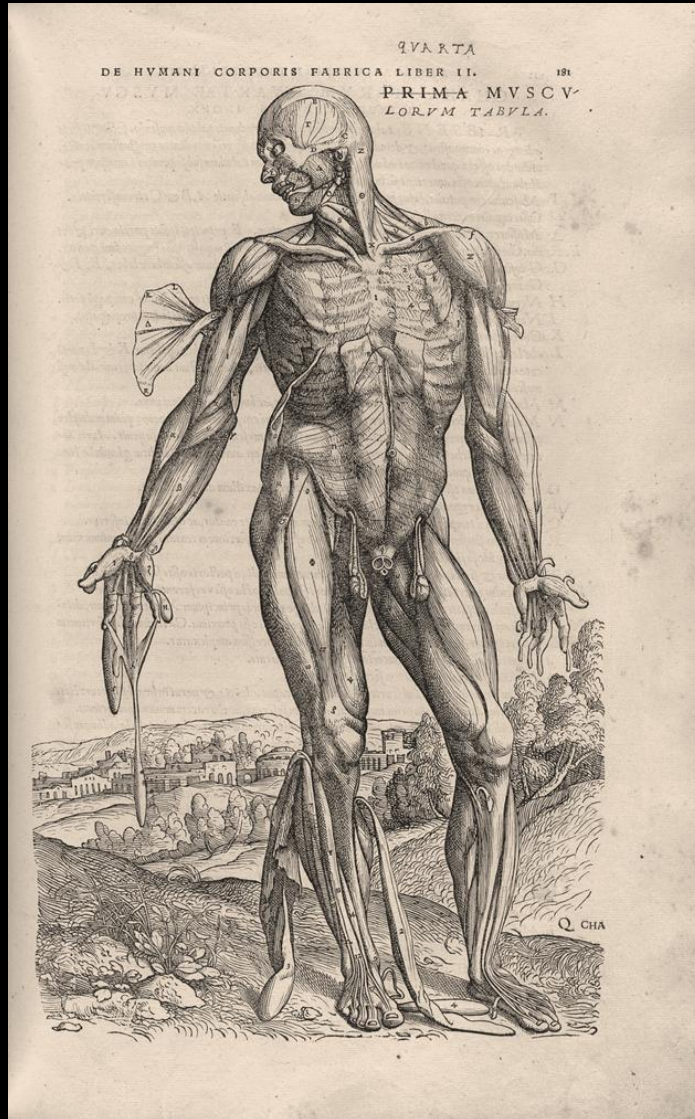
- Agitation: a temporary disruption of the typical physician-patient collaboration, which interferes with assessment and treatment, during a period when immediate assessment and treatment are needed Allen, 2000



Gatekeeper/treatment model - some limitations

- Diagnostic validity & utility
 - Psychometrics, clinimetrics, communimetrics
- Decision making capacity
- Continuity of care

... limited diagnostic validity ...

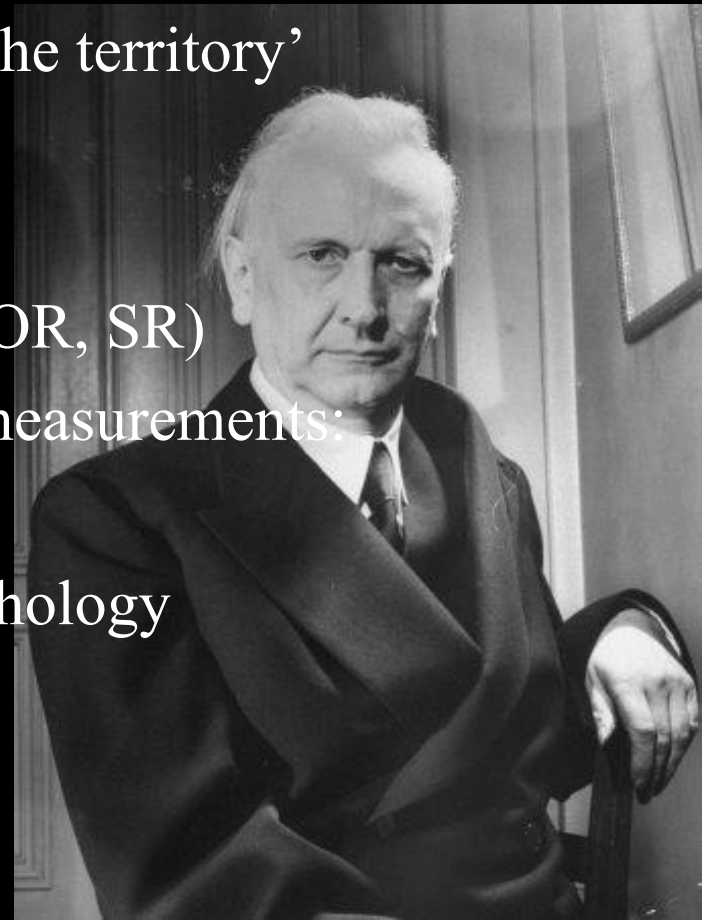


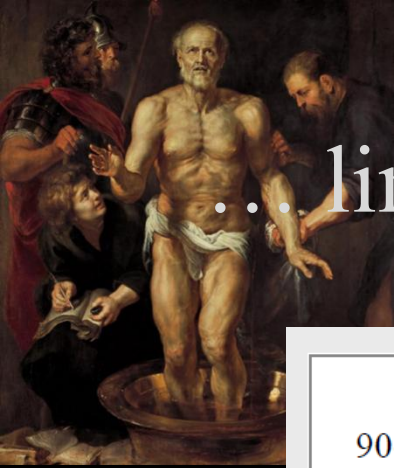
- **Validity**: concordance = 0,47 (kappa value) Taggart et al., 2006
- **Stability**: concordance = 0,32 (psychotic disorder), 0,48 (bipolar disorder) & 0,56 (depressive disorder) (kappa value) Woo et al., 2006
- **Interrater reliability**: concordance = 0,28 (severity), 0,48 (depressive disorder), 0,64 (psychotic disorder) & 0,65 (substance abuse) (intraclass coefficient) Way et al., 1998

... limited diagnostic utility ...

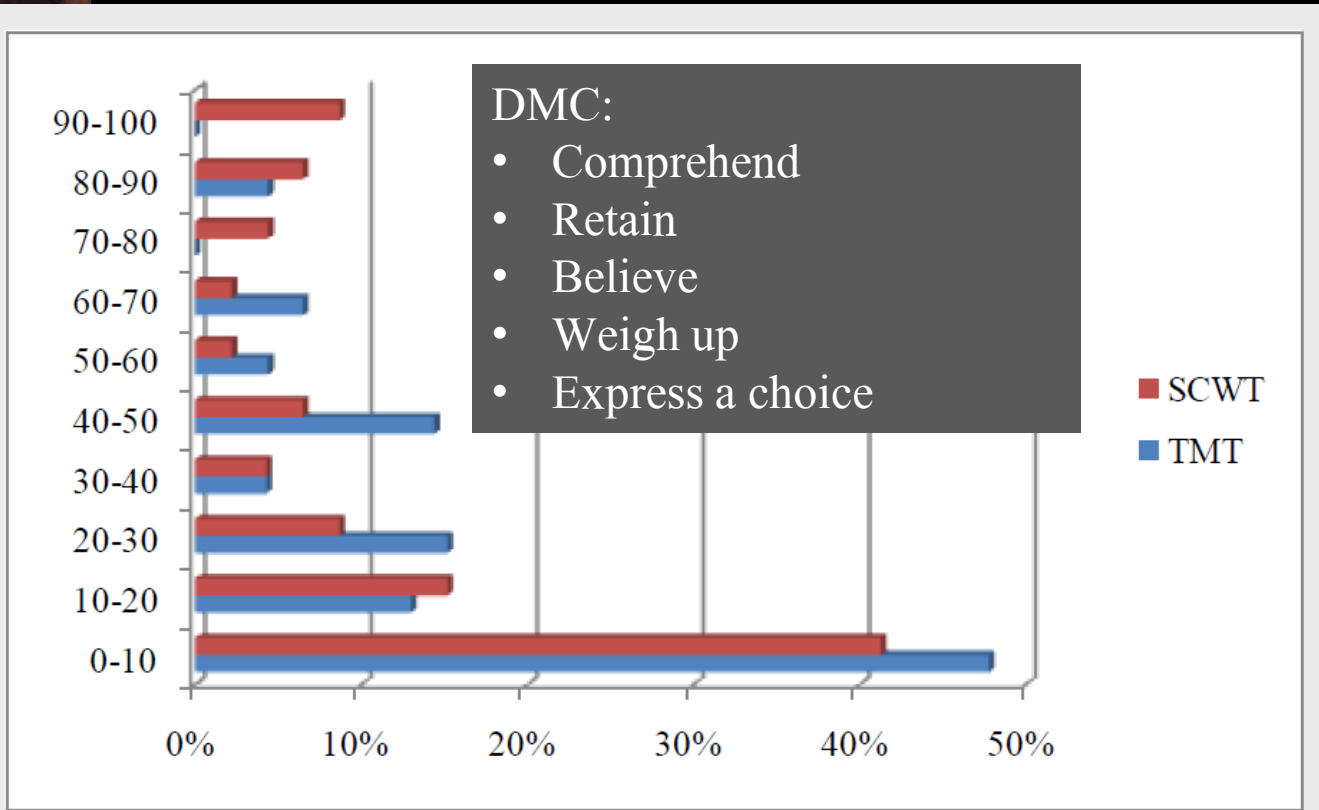
- Some utility in organizing care and finances
- Poor utility in outcome measurement
- Poor clinimetric utility: ‘the map is not the territory’
- Poor communimetric utility

- Some advantage of using rating scales (OR, SR)
- Development of emergency diagnoses/measurements:
 - e.g. agitation, suicidality
- Reintroduction of descriptive psychopathology





... limited decision making capacity ...



Distribution of percentiles of Stroop Colour-Word Test and Trail Making Test

... limited decision making capacity ...

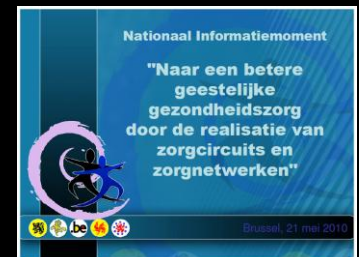
- Anterograde amnesia in patients after a benzodiazepine overdose Verwey-B, 2000/2005
 - Verbal recall test: day 1 < 2, ~ benzodiazepine plasma level
 - Photo recognition test (6 photos; do you recognize anyone, who do you recognize, how do you know this person):
 - Less than half of the patients recognized the psychiatric resident from the photograph and knew that he was the one formally spoken to the day before.
 - Sedation didn't not predict the degree of anterograde amnesia.

... limited continuity of care ...

- Bottleneck phenomenon
- Poor adherence to treatment/referral
- Post PES consultation services
- Crisis resolution and home treatment teams

Crisis Resolution and Home Treatment teams

- Organization of mobile crisis intervention teams and units (NRVZ, 2009)
 - High number of patients with mental health problems in EDs
 - Inappropriate assessment/management in outpatient care
 - Inappropriate assessment/management of these patients in EDs
 - **Mobile crisis units for patients with severe and often chronic mental disorders**
- Naar een betere geestelijke gezondheidszorg door de realisatie van zorgcircuits en zorgnetwerken“
 - Functie 2a: “Ambulante intensieve behandelteams voor acute psychische” problemen



Flemish Crisis Resolution and Home Treatment: a very brief history?

CRISIS IN ACUTE CARE

- Increase in acute admission rates/compulsory admissions
- Dissatisfaction with response to psychiatric emergencies (patients, carers, GPs)
- Dissatisfaction with acute hospital wards
 - Poor physical environments
 - Unsafe environment
 - Limited opportunities for activity
 - No clear therapeutic model for crisis resolution
 - Limited contact between staff and patients

Flemish Crisis Resolution and Home Treatment: a very brief history?

- Missed opportunities of evidence-based service organization?
- No organic development!
- Same British conditions presumed but not proven?
 - Adopt or adapt?
- Development of CRHT post PES



Psychiatric Emergency (Services): the Belgian experience.

Q & A?

