Recovery, Employment and Empowerment

Richard Warner

Colorado Recovery, Boulder
and
University of Colorado

Recovery Model (or Movement)

Subjective experiences of:

- **optimism about outcome**
- **empowerment**
- **interpersonal support**

among:

- people with mental illness
- carers
- service providers

Creation of services that engender:

- culture of healing
- support for human rights

Recovery Model

Leads to an interest in:

fighting stigma
service-user education
peer support

Implications for services:

treatment decisions taken collaboratively with users
user-run services (e.g. warm-lines, drop-in centres)
collaborative models (e.g. clubhouse,
co-taught educational services)
access to employment

Recovery Model (or Movement)

Earlier movements

- Early 1800s - Moral treatment
- Early 1900s - Mental hygiene movement
- Post WWII - Social psychiatry revolution

20th century outcome studies in schizophrenia

European and North American studies from 1904 to 2000 and recent Japanese studies

Admission cohorts from late 1880s to early 1990s

Mixed duration of illness and mixed subtypes

Follow-up 1 to 40 years after admission

20th century outcome studies in schizophrenia

Measures

Complete recovery: Loss of symptoms of psychosis
and return to a pre-illness level of functioning

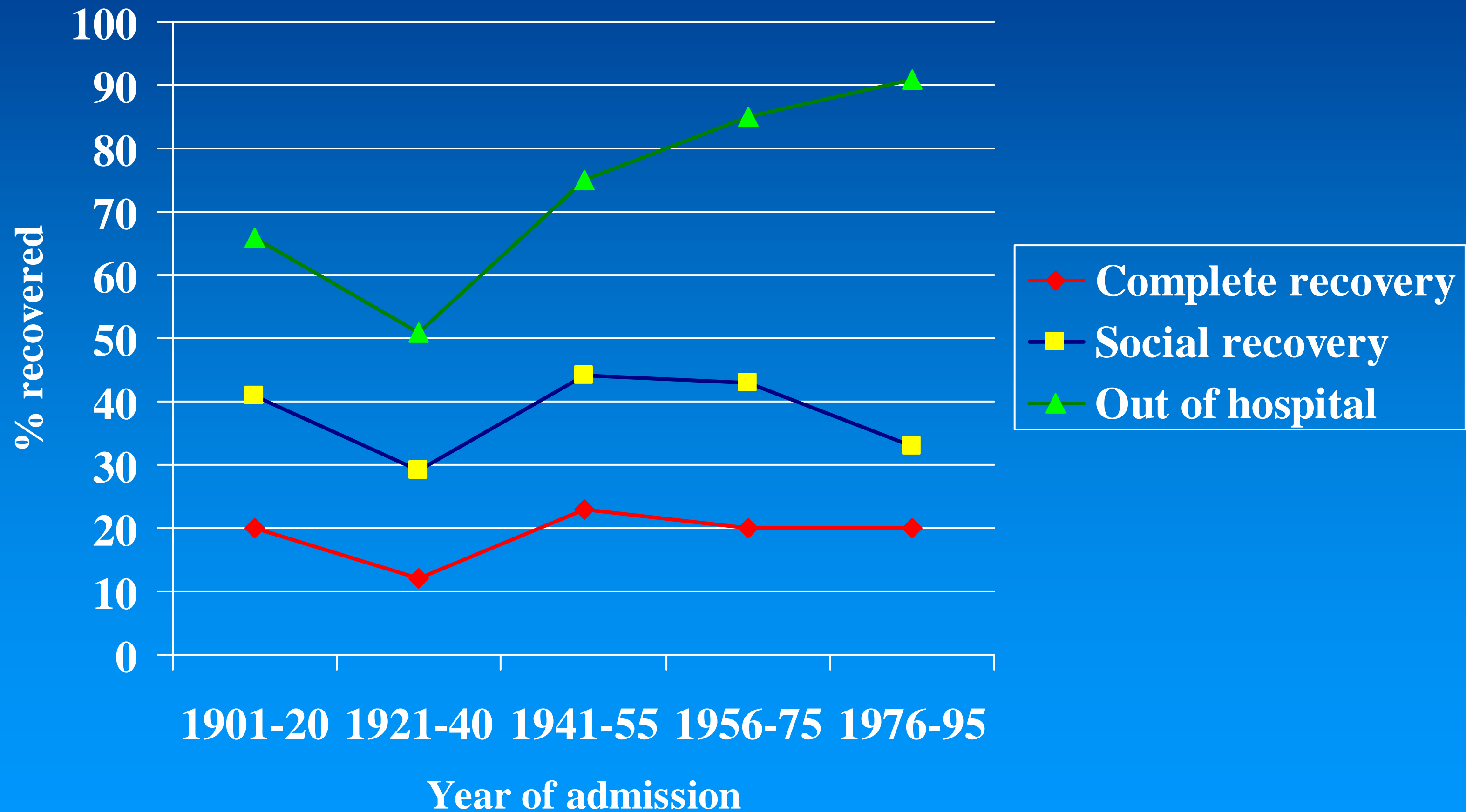
Social recovery: Economic and residential
independence and low social disruption

In hospital at follow-up

20th century outcome studies in schizophrenia

Year of admission	No. of subjects
1901-20	1,919
1921-40	4,264
1941-55	3,285
1956-75	3,160
1976-95	1,951

Recovery from schizophrenia in Europe & North America



Outcome in schizophrenia: most recent reports

Lambert et al, 2008

Hamburg, Germany: 3-year follow-up

400 subjects with schizophrenia (never-previously treated)

Complete recovery = 17%

(6 months of symptomatic and functional remission + adequate QOL)

Harrow & Jobe (2007)

Chicago, USA: 15-year follow-up

64 subjects with schizophrenia

Complete recovery = 19%

(1 year of symptomatic remission + adequate work & social functioning. The majority no longer on medication.)

Outcome in schizophrenia: most recent reports

Crumlish et al, 2009

Dublin, Ireland: 8-year follow-up

67 subjects with first-episode non-affective psychosis

Social recovery = 39%

Conclusions about Long-term Outcome

Outcome worse during the Great Depression

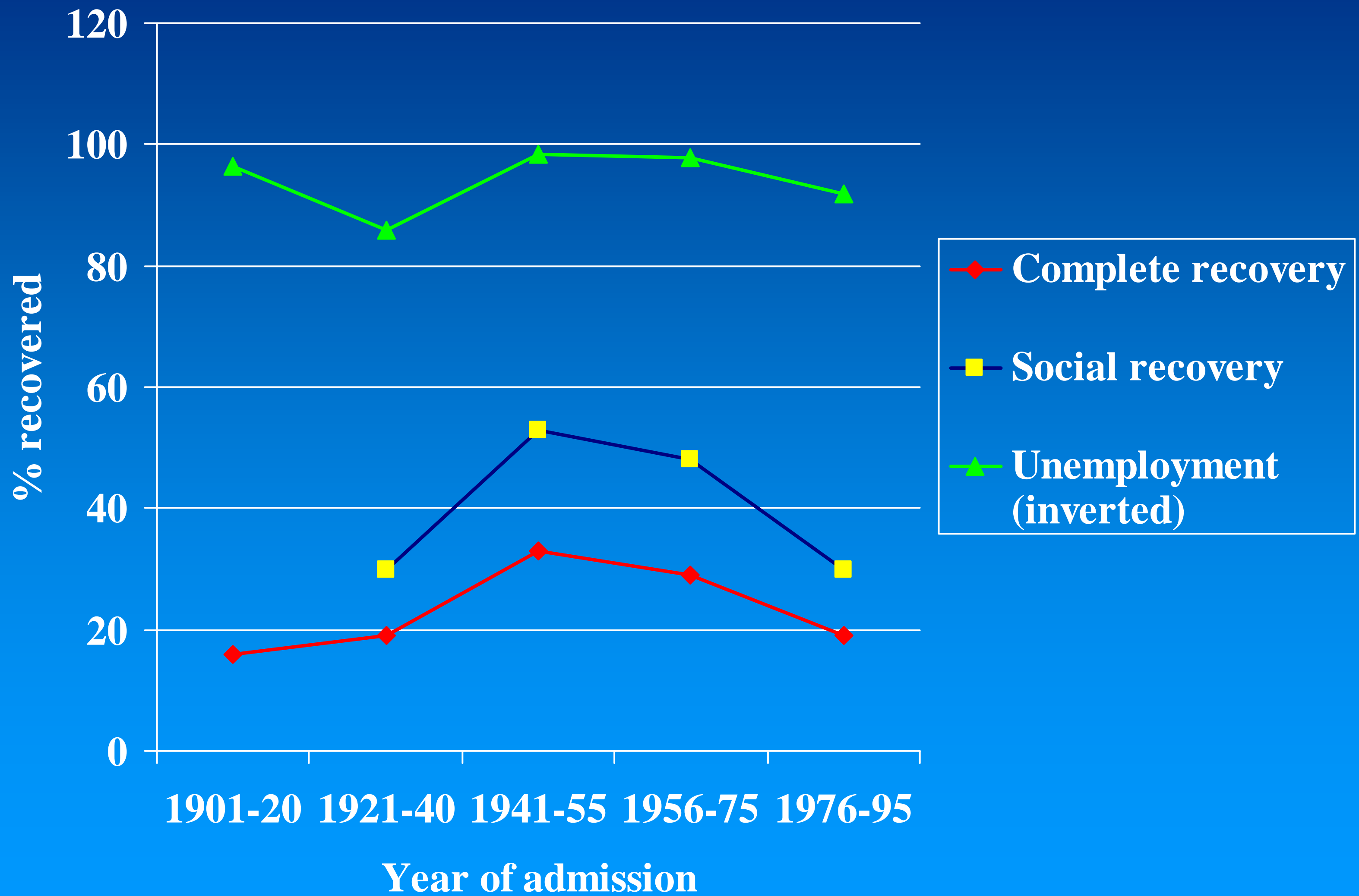
Otherwise:

- Constant complete recovery of 20%
- Constant social recovery of 40%

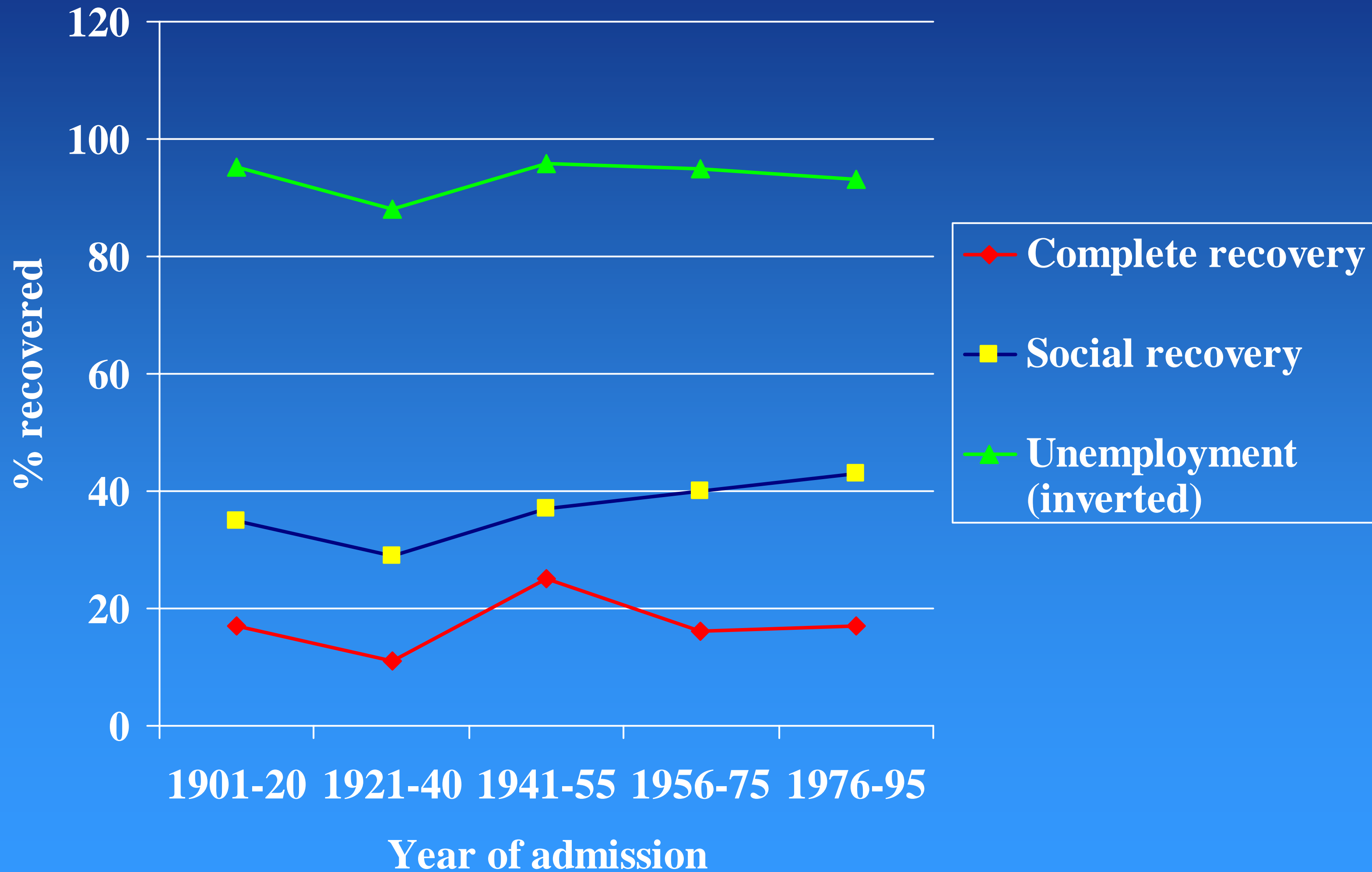
Antipsychotic drugs ineffective in improving complete or social recovery

Deinstitutionalisation ineffective in improving social recovery

Recovery & (inverted) unemployment in Britain



Recovery & (inverted) unemployment in US



20th century outcome studies in schizophrenia

Pearson correlation coefficient

Recovery type	Unemployment			
	US		UK	
	r	α	r	α
Complete	0.96	0.01	0.91	0.03
Social	0.92	0.03	0.98	0.003

Work improves outcome in schizophrenia

Macro-economic observations:

- Increasing admissions during economic slump
- Outcome worse in Great Depression
- Outcome better in UK in 1955-75 than in 1975-95
- Outcome better in Third World villages
- Outcome better for better-educated in developed world & worse-educated in developing world

International Study of Schizophrenia (2007)

Data from:

16 centers around the world

Follow-up of 1000+ subjects over 12 to 26 years

Incidence cohorts

- Determinants of Outcome of Severe Mental Disorders
- Reduction and Assessment of Psychiatric Disability
- Chennai (Madras)
- Hong Kong

Prevalence cohorts

- International Pilot Study of Schizophrenia
- Beijing

International Study of Schizophrenia: Outcomes

	GAF % 71+	Bleuler sx % "recovered"
*Agra	75	77
Prague (1968 cohort)	74	72
* Chandigahr/rural	67	60
* Chennai	62	58
* Chandigahr/urban	61	66
Moscow	58	75
* Hong Kong	51	53
Groningen	46	73
Nottingham	43	61
* Beijing	41	38
Prague (1978 cohort)	36	58
* Cali	31	57
Nagasaki	30	28
Dublin	29	37
Honolulu	27	42
Rochester	26	55

* Developing world centres

International Study of Schizophrenia: Employment

Full-time paid employment for past 2 years

	Site	%
*	Chandigahr/urban	54
*	Chandigahr/rural	37
*	Agra	41
*	Cali	40
*	Chennai	38
	Moscow	38
	Nottingham	29
	Mannheim	29
*	Hong Kong	27
	Prague (1978 cohort)	27
	Rochester	25
	Honolulu	23
	Nagasaki	21
	Sofia	19
*	Beijing	17
	Groningen	17
	Dublin	13

High rates of employment in the developing world attributed to lack of disincentives created by disability benefits.
(Srinivasan, 2005)

International Study of Schizophrenia

Disability benefits lower for developing world patients

Receiving disability benefits in past 2 years

Site	%
Chandigahr/urban	1.2%
Chandigahr/rural	2.6%
Agra	0 %
Cali	4.2%
Chennai	1.3%
Rochester	41.9%
Dublin	51.4%
Honolulu	53.8%

Mortality in Serious Mental Illness

People with mental illness in the US die 25 years earlier than people in the general population

- largely due to medical causes rather than suicide or accidents
- risk factors: smoking, diet, exercise, obesity, poor health care

Druss et al, Am J Psychiatry, 167:151-9, 2010

Mortality in Serious Mental Illness

Mortality among people with schizophrenia in Southampton, UK, is nearly 3 times greater than in the general population

- 73% of people with schizophrenia are smokers

- elevated rates of suicide, respiratory disease, diabetes, strokes and heart attacks

Brown et al, Br. J Psychiatry, 196:116-121, 2010

International Study of Schizophrenia: Mortality

	SMR (All deaths/expected)
Groningen	8.88
* Hong Kong	5.76
Nagasaki	5.71
Mannheim	5.55
Dublin	4.10
Prague (1968 cohort)	3.84
Nottingham	3.31
Honolulu	3.13
* Chandigahr/rural	3.02
* Beijing	2.97
Prague (1978 cohort)	2.53
* Chennai	1.90
* Chandigarh/urban	1.88
*Agra	1.86
Moscow	1.41
* Cali	1.31
Sofia	1.04

A systematic review of mortality in schizophrenia

Saha et al., Arch Gen Psychiatry, 64: 1123-31, 2007

Mortality by economic development status

	SMR
Least developed countries	2.25
Emerging economies	2.57
Developed countries	2.77

International Study of Schizophrenia: Living Situation

	% living with family/friends
* Chandigahr/rural	97
* Agra	95
* Chennai	95
* Cali	92
* Chandigarh/urban	91
* Beijing	81
Dublin	81
* Hong Kong	79
Prague (1978 cohort)	72
Moscow	71
Sofia	70
Nottingham	66
Rochester	64
Prague (1968 cohort)	63
Nagasaki	61
Honolulu	53
Mannheim	48
Groningen	41

International Study of Schizophrenia

Social inclusion

Proportion of subjects married

India:	71% male
	74% female
Developed world:	28% male
	48% female

International Study of Schizophrenia

Conclusion

Enhanced outcome in Third World related to:

- Family involvement
- Social inclusion
- Employment

Effectiveness of vocational programmes

Review by Lehman (1995):

No effect on long-term employment until the 1970s

No improvement in *competitive* employment until the introduction of supported employment in the 1990s

After 1990:

Competitive employment:

Meta-analysis of 11 studies (Crowther 2001)

Supported employment	34%
Standard vocational rehab	12%

Analysis of 11 studies (Bond 2008)

Supported employment	61%
Controls	23%

Non-vocational outcomes of vocational rehabilitation since 1990

- Reduction in hospital admission
  (Drake 1996; Bell 1996; Warner 1999; Brekke 1999, Burns 2007)
- Reduction in the cost of treatment
  (Bond 1995; Warner 1999)
- Reduction in positive & negative symptoms of psychosis
  (Anthony 1995; Bell 1996; McFarlane 2000; Bond 2001)
- Improvements in quality of life
  (Mueser 1997; Warner 1999; Bryson 2002)
- Increased self-esteem
  (Mueser 1997; Kates 1997; Bond 2001; Casper 2002, Becker: 2007)
- Improvements in functioning & illness management
  (Mueser 1997; Brekke 1999; Becker, 2007)
- Social network expansion
  (Angell 2002)

The research might show a greater impact of work on the symptoms and course of psychosis, except:

- all the studies are brief — 6-18 months
- the samples are of patients with a long duration of illness

EQOLISE study of supported employment in 6 European centers

	IPS	Standard vocational service
Worked at least 1 day	55%	28%
Number of hours worked/18 months	429	119
Job tenure (days)	214	83
Drop-out	13%	45%
Admitted to hospital	20%	31%
% time in hospital	14%	20%

EQOLISE Study: The effectiveness of supported employment for people with severe mental illness.

Burns et al., Lancet, 370: 1146-52, 2007

RCT conducted in 6 European countries

Employment limited by disincentives to employment in pension system

	Effect of supported employment on obtaining employment
High disincentives	
London, UK	0.32
Groningen, Netherlands	0.31
Low disincentives	
Ulm, Germany	0.48
Zurich, Switzerland	0.27
No disincentives	
Rimini, Italy	0.46
Sofia, Bulgaria	0.61

Employment in schizophrenia

Marwaha et al. B J Psychiatry 191: 30-37, 2007

Centre	% employment for subjects with schizophrenia	% regional employment rate
Heilbronn, Germany	60	67
Hemer, Germany	27	61
Leipzig, Germany	24	61
Leicestershire, UK	19	75
Marseille, France	17	57
Lyon, France	10	63
Lille, France	8	52
London, UK	7	65

Empowerment of people with mental illness

Basic premise

Because of internalized stigma:

People who accept the label of mental illness conform to the stereotype of a mentally ill person as being incapable and worthless.

They become socially withdrawn and dependent.

Thus, insight leads to poor outcome, unless the person can reject the stigma of mental illness and regain a sense of power and competence.

Empowerment of people with mental illness

Warner et al. Amer J Orthopsychiat 59: 398-409 (1989)

54 subjects with non-acute psychotic illness

Acceptance of mental illness (insight)
+ internal locus of control (empowerment)
is associated with good outcome

But:
Acceptance of mental illness is associated with
external locus of control and
external locus of control is associated with poor outcome

So: Insight must be associated with empowerment to lead to good outcome

Empowerment of people with mental illness

Lysacker et al., Psychiatry Res.149: 89-95 (2007)

Cluster analysis of 75 people with schizophrenia

3 groups

1. Low insight / low internalized stigma group
2. High insight / low internalized stigma
   = highest functioning
3. High insight / high internalized stigma
   = lowest levels of hope & self-esteem

Internalized stigma may reduce self-esteem and eventual outcome

Empowerment of people with mental illness

Harrow and Jobe, 2007

64 people with schizophrenia followed for 15 years

Over 1/3 of subjects no longer taking medication.

19% in complete recovery.

Patients off medication and in recovery were more likely to have had an internal locus of control when evaluated 5-10 years earlier

Empowerment of people with mental illness
Yanos et al, 2008

Path analysis of 102 people with schizophrenia

Internalized stigma associated with
an external locus of control, social avoidance
and depression

Empowerment of people with mental illness
Vauth et al, 2007

Analysis of 172 people with schizophrenia, using structural equation modeling

Reduction in empowerment explains 46% of depression & 58% of QOL reduction.

Internalized stigma and avoidant coping explained 51% of the reduction in empowerment.

Empowerment and reduced internalized stigma should improve outcomes

Shared decision making is an ethical imperative

Drake & Deegan , 2009

- 96% of people with psychosis are competent to make a choice about medications

- service users should make decisions about symptom relief vs. risks of weight gain, diabetes, sexual side effects , etc.

Psychiatrist communication

Goss et al, 2008

16 psychiatrists in Verona
80 transcripts of first outpatient consultations

Psychiatrists showed minimal attempts to involve patients in treatment decision-making

User-operated services & empowerment

Corrigan, 2006

1,824 psychiatric patients

Participation in peer support associated with these empowerment components:

- self esteem and self-efficacy
- power
- community activism and autonomy
- optimism and sense of control
- righteous anger

User-operated services

Sells et al, 2008

137 people with serious mental illness assigned to peer service providers or professional service providers

Peer providers:

- more validating
- equally successful in challenging patients' attitudes & behaviors

Resnick & Rosenheck, 2008

218 participants in a Veteran-to-Veteran peer education & support compared to an earlier cohort

Vet-to-Vet participants - more empowered & confident

Summary-1

- The recovery model emphasizes optimism about recovery, empowerment, and the importance of work and user-involving services
- Optimism about recovery from schizophrenia is supported by the research data
- Recovery is greater and mortality is lower in the developing world

Summary - 2

- Work helps people recover from schizophrenia
- Modern vocational rehabilitation makes work feasible for people with mental illness
- Recent research suggests that empowerment is important in recovery
- User-operated services can increase empowerment and improve outcomes

What we should do

Improve health care and wellness for people with mental illness

Reduce disincentives to employment

Tackle internalized stigma (and not just insight) to increase user empowerment