# Recent Advances in Research on IMR

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### Disclosure

- All my clothes were made by my son, J. Mueser
- Bespoke Hand Tailored Suits and Shirts, with stores in New York City:



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### **Outline**

- Background to development of Illness Management and Recovery (IMR) program (also called Wellness Management and Recovery: WMR)
- Brief description of IMR program
- Translations of IMR program
- Research on IMR and adaptations of IMR
- IMR and the world
- What have we learned and where are we going?

## Illness Self-Management

- Focus on reducing symptom distress and interference, and preventing relapses and rehospitalizations
- Emphasis on illness self-management in collaboration with others
- By 2003, research had examined multiple illness self-management methods, BUT--
- No one program incorporated all methods
- IMR was developed to incorporate empirically supported methods for illness self-management into a single cohesive program

# Early Research on Illness Self-Management

- 40 randomized controlled studies of illness management programs reviewed by Mueser et al. (2002)
- 5 effective components of successful programs identified
  - Psychoeducation
  - Medication self-management strategies
  - Relapse prevention training
  - Coping with stress and symptoms
  - Social skills training to increase social support
- IMR developed in order to incorporate these components of illness self-management into a single integrated program

### "In a nutshell..."

IMR is a step-by-step program that helps people set meaningful goals for themselves, acquire information and skills to develop more sense of mastery over their psychiatric illness, and make progress towards their own personal recovery.

Personal goals are set by each person's conceptualization of what recovery means to them.

## **Overall Goals of IMR Program**

- Inspire hope about recovery
- Prepare people to be informed decision-makers about their own treatment
- Increase mastery over their mental illness
- Free people up to spend less time dealing with their mental illness and more time enjoying life



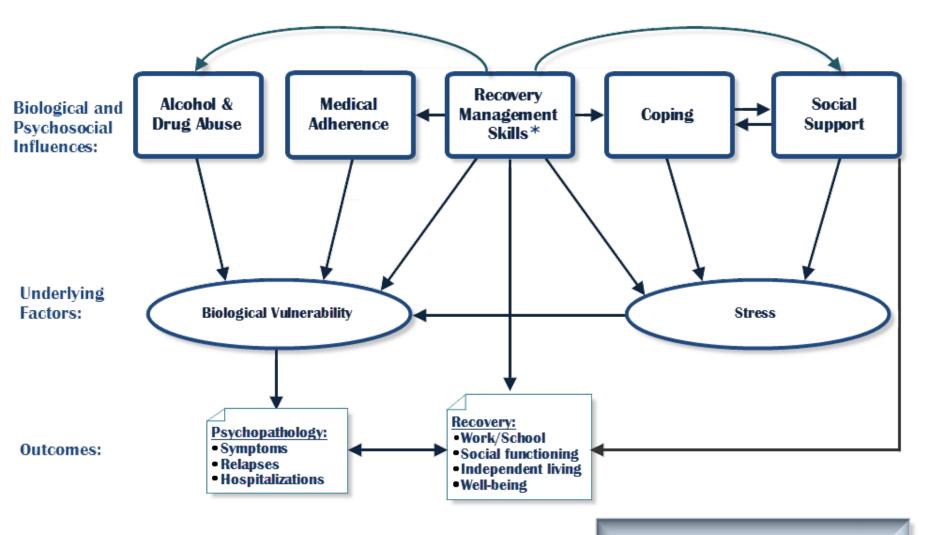
### **IMR Program and Materials**

- Developed as part of the Implementing Evidence Based Practices project, 2002-2007 (PI: Robert Drake)
- Supported by SAMHSA and RWJ Foundation
- Multi-stakeholder advisory panels oversaw development of materials (researchers, clinicians, clients, family members, administrators)
- Co-authored by Susan Gingerich and Kim Mueser
- 2<sup>nd</sup> edition of IMR available free from SAMHSA: http://store.samhsa.gov/product/SMA09-4463
- Range of materials developed to support implementation (manual, intro video, training video, information brochures for different stakeholders, fidelity scale)

## **Core Ingredients of IMR Program**

- > 3 editions since 2003
- > 10-12 months of weekly sessions
- Group or individual format
- Clients set and pursue personal recovery goals over course of program
- > 11 educational handouts
- Practitioners teach illness self-management using motivational, educational, and cognitive behavioral techniques
- Home assignments are developed together
- > Involvement of significant others is encouraged
- Information and skills taught in IMR program based on stress-vulnerability model of severe mental illness

#### **Expanded Stress Vulnerability Model**



#### \*Recovery Management:

- Pursuit of personal goals
- Understanding of mental illness
- Shared decision making
- Relapse prevention plans

### **IMR Modules**

- 1. Recovery Strategies
- 2. Practical Facts about Mental Illness
- 3. The Stress-Vulnerability Model
- 4. Building Social Support
- 5. Using Medication Effectively
- 6. Drug and Alcohol Use
- 7. Reducing Relapses
- 8. Coping with Stress
- 9. Coping with Problems and Persistent Symptoms
- 10. Getting Your Needs Met in the Mental Health System
- 11. Healthy Living

### Translations of IMR

- Arabic
- Chinese (3 versions)
- Danish
- Dutch
- French
- Hebrew
- Hmong
- Italian
- Japanese
- Korean
- Laotian
- Malay

- Portuguese
- Russian
- Somalian
- Spanish
- Swahli
- Swedish

# Randomized Controlled Trials (RCTs) of IMR Program

- 10 RCTs conducted in 6 countries
- 3 RCTs with strong implementation (clients in IMR participated in > 50% of IMR sessions)
- 2 RCTs with weak implementation
- 2 RCTs implementing IMR on Assertive Community Treatment (ACT) teams
- 3 RCTs evaluating different adaptations of IMR

# RCTs with Strong Implementation of IMR

- 3 studies conducted in different countries and different languages:
  - Israel (Hanson-Ohayon et al., 2007)
  - US (New York City; Levitt et al., 2009)
  - Sweden (Färdigh et al., 2011)
- All studies compared group-based IMR with usual care for persons with SMI (total N = 354)
- Careful attention paid to supervision of practitioners providing IMR, fidelity to IMR model, and engagement of clients in program
- Intent-to-treat analyses conducted on all participants randomized to IMR or usual care

# Results of 3 RCTs with Strong Implementation of IMR

- Greater improvements in illness self-management skills for IMR participants than usual care
- Greater reduction in symptoms for IMR participants than usual care in studies using blinded assessments
- More improvement in psychosocial functioning in IMR participants than usual care
- Mixed findings on social support: some benefit in use of support to facilitate coping
- No differences in hospitalization rates; however, clients in all studies were stable at baseline and at low risk for relapse
- Secondary analysis of Medicaid database of IMR on ACT teams in Indiana suggests IMR reduced hospitalizations (Salyers et al., 2011)

# RCTs with Weak Implementation of IMR

- 2 studies evaluated group-IMR conducted in different countries and different languages:
  - US: Compared IMR with problem solving in 114 veterans with SMI (Salyers et al., 2014)
  - Denmark: Compared IMR with usual treatment in 198 clients with SMI (Dalum et al., 2018; Jensen et al., 2019)
- Both studies were methodologically rigorous (blinded interviewers, follow-up assessment, intent-to-treat analyses)
- BUT, both studies had low rates of client participation in IMR:
  - < 25% exposed to >50% of IMR sessions in US study
  - < 50% exposed to >50% of IMR sessions in Danish study
- FURTHERMORE, clients randomized to IMR in Danish study waited an average of 88 days to begin an IMR group

# Results of 2 RCTs with Weak Implementation of IMR

- No beneficial effects of IMR found
- Conclusions?
  - You can meet every Cochrane review criterion for a "methodologically rigorous" RCT but still produce an uninformative study:
  - The effectiveness of a psychosocial program can't be evaluated if participants are not successfully engaged and retained in treatment
- Successful engagement in IMR should be a concern of researcher, but requires active involvement of entire treatment team, and integration of IMR progress with team

# RCTs Implementing IMR on ACT Teams

- 2 studies used cluster RCT approach to compare IMR implemented on ACT teams vs. usual ACT:
  - Salyers et al. (2010): 4 teams (2 each condition), N=324 (full teams)
  - Monroe-Devita et al. (2018): 8 teams (4 each condition), N=101 (randomly selected from teams)
- Salyers study:
  - IMR provided by peer specialists
  - Low rate exposure to IMR (26% any participation)
  - No differences between ACT only and ACT+IMR except fewer hospitalizations for ACT+IMR
- Monroe-Devita study:
  - IMR provided by ACT team members
  - Higher exposure to IMR than Salyers (41%), but still less than desired
  - Significant differences between teams in client participation in IMR
  - Stronger effects on self-management and functioning in clients with higher levels of participation in IMR

Results Comparing Exposure to IMR by ACT+IMR Team

ACT Team	N	M	SD	F- values	P- values
Number of completed IMR modules				4.99	.004
Team 1	12	4.8	2.2		
Team 2	12	5.6	3.3		
Team 3	15	2.1	2.4		
Team 4	14	6.1	4.0		
Total number of IMR sessions attended				5.02	.004
Team 1	12	27.3	8.7		
Team 2	12	29.3	13.6		
Team 3	15	14.8	13.9		
Team 4	14	16.4	10.7		

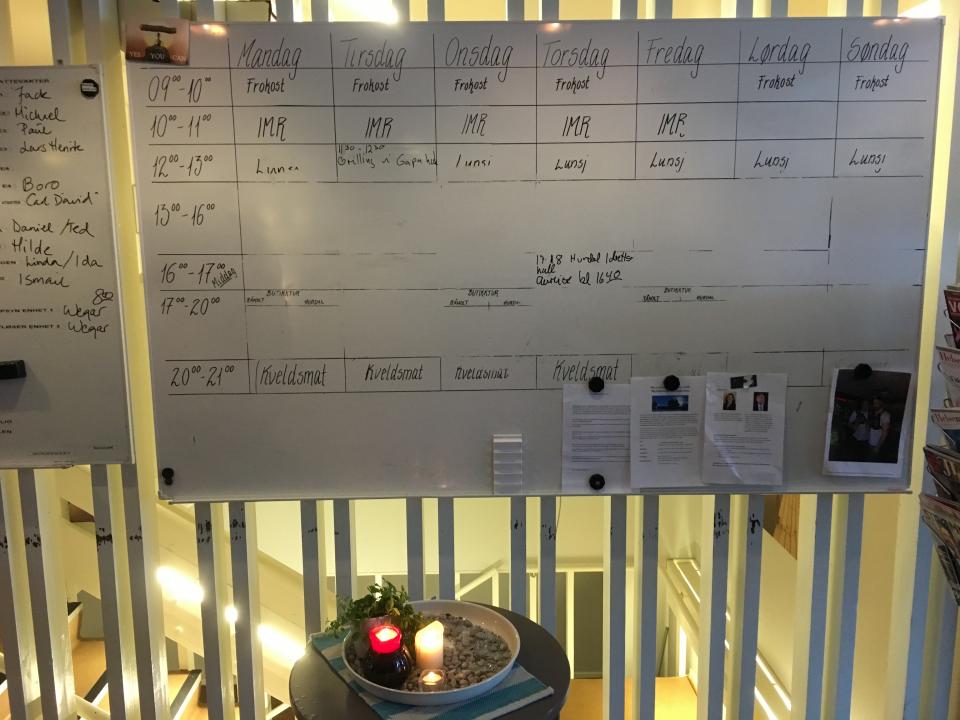
# RCTs Evaluating Adaptations of IMR Program

- IMR in acute hospital setting in Singapore (Tan et al., 2017), N=50:
  - Abbreviated IMR (3 sessions) provided before discharge into community vs. usual care
  - Clients in IMR improved more in illness self-management, symptoms, and functioning
  - IMR clients had fewer hospitalizations over 12 months
- Integrated Chronic Medical and Psychiatric Self-management: I-IMR in US (Bartels et al., 2013), N=71:
  - I-IMR vs. usual treatment for clients with SMI and co-occurring medical disorders
  - I-IMR clients had greater improvements in psychiatric and medical selfmanagement
  - Over 14 month follow-up I-IMR clients had fewer psychiatric or medical hospitalizations
- IMR Enhanced with Electronic Health (IMR+e-Health) in the Netherlands (Beentjes et al., 2016), N=60:
  - IMR+e-Health vs. IMR compared in small cluster RCT (4 sites, 2 per condition)
  - Some evidence that e-health component increased participation in IMR program compared to usual IMR
  - e-health component under-utilized, with <50% of clients accessing program ever and 34% being regular users
  - Promising, but under-powered study and more work clearly needed

## Other Adaptations or Novel Implementations of IMR Needing Research

- Enhanced IMR (E-IMR) integrating co-occurring substance use and psychiatric disorders (newly translated into Norwegian)
- IMR for people with intellectual disability: The Healthy Happy Life Class
- IMR for SMI clients with forensic involvement (Morgan et al., 2018)
- Vocational IMR (VIMR) for people with SMI returning to work
- IMR for homeless individuals with SMI
- Integration of IMR with cognitive remediation (McGurk & Mueser)
- IMR implemented in long-term hospital settings
- Intensive IMR implemented in inpatient setting in order to permit safe withdrawal from psychotropic medications for clients who either do not benefit or object to medication (e.g., Hurden Hospital, Norway)





### IMR Throughout the World

- Multiple RCTs of IMR currently underway in other countries (e.g., Denmark, the Netherlands)
- Large scale implementation efforts underway in some U.S. states and countries (e.g., Israel, Sweden)
- Local/regional adaptations to the IMR program to fit the culture and context of treatment setting common
- Term "illness management and recovery" often used to refer to integrated approach to engaging clients in their own treatment, empowering them by shared decision-making, optimistic outlook through recovery vision

### What Have We Learned?

- If you create accessible, free content about mental illness and its management, people will access it, teach it, and learn it
- Permitting local control and adaptation has spurred adoption, but can also lead to problems in implementation and uptake
- Embedding the recovery vision and goal setting into teaching illness self-management is effective at engaging clients in participating and learning about their own treatment
- The language of recovery and process of goal setting, in the context of teaching structured curriculum and skills, has been a powerful vehicle for enlightening clinicians, clients, and family members



### What Have We Learned? Cont'd

- In order for clinicians to inspire hope in their clients, they themselves must be hopeful
- IMR can provide a common language between: clients, clinicians, and families; inpatient and outpatient services; people from different cultures, backgrounds
- IMR is grounded in the core humanistic values of recovery-oriented services, with a curriculum and structure to facilitate learning and practice
- The message of wellness contained within the IMR program, the "normalization" of mental illnesses, and the ability to adapt the methods and curriculum of IMR has the potential to change the lives of people with SMI throughout the world





#### **Conclusions**

- Over the past 15+ years, IMR has become an increasingly used tool for promoting the vision of recovery through active engagement, collaboration, and teaching
- Research supports the effectiveness of IMR at improving illness-related outcomes, although many questions persist
- The IMR framework has proved rich in ability to spawn adaptations and modifications for different settings and groups
- IMR isn't just for people with SMI: much of the information and many skills are applicable to helping everyone get the most out of life