Increasing the LifeSPAN

(Understanding the NASMHPD Morbidity and Mortality Report)

Presented by

New York State Office of Mental Health

Acknowledgements

- Joseph Parks, M.D.
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- Benjamin Druss, M.D.
- The National Association of State Mental Health Program Director's Medical Council

President's New Freedom Commission on Mental Health

- Goal 1

  "Americans understand that mental health is essential to overall health."

The National Academies Institute of Medicine

- Millions of Americans today receive health care for mental and substance-use problems and illnesses.
- These conditions are the leading cause of combined disability and death of women and the second highest of men.

Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series 2005

Elimination of Mental Health Disparities

"Even more than other areas of health and medicine, the mental health field is plagued by disparities in the availability of and access to its services. These disparities are viewed readily through the lenses of racial and cultural diversity, age, and gender."

Surgeon General David Satcher, M.D., Ph.D. in Mental Health: A Report of the Surgeon General (DHHS, 1999)

Health Vulnerability for People with SMI

- Homelessness
- Victimization / Trauma
- Poverty
- Incarceration
- Social isolation
- Unemployment

Why be concerned?

- SMI and Over-use of Medical Services
- SMI and Under-use of Medical Services
- Biological Factors

SMI and Over-use of Medical Services

- Depressed patients are “high utilizers” of medical services (e.g. Simon 1995)
- Persons with SMI have high use of somatic emergency services (Salisberry et al 2005, Hackman et al 2006)

SMI and Under-use of Medical Services

- Fewer routine preventive services (Druss 2002)
- Worse diabetes care (Desai 2002, Frayne 2006)
- Lower rates of cardiovascular procedures (Druss 2000)

Medical Comorbidity and Risks in Persons With Mental Health and Substance Use

- Elevated rates of a range of medical comorbidities e.g.
  - Cardiovascular disease (Dickey 2002)
  - Pulmonary diseases (Sokal 2004, Himelhoch 2004)
  - Diabetes
  - Hepatitis/HIV (Rosenberg 2004)
- Elevated medical mortality (Harris 1998; Hannerz 2001

Schizophrenia: Natural Causes of Death

Higher standardized mortality rates than the general population from:

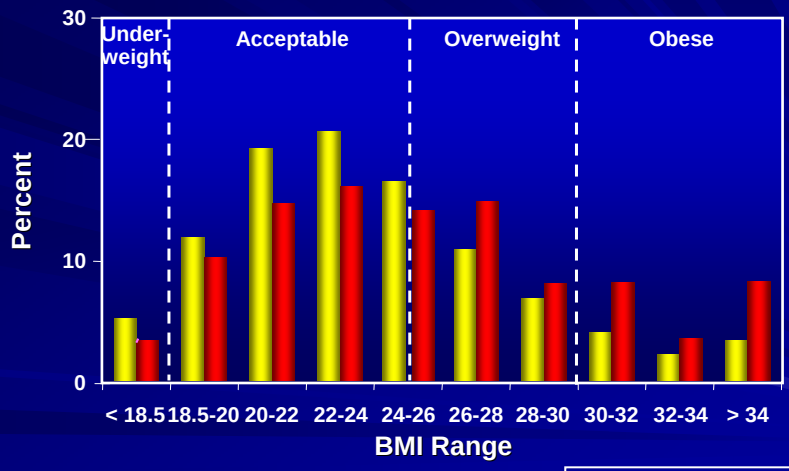
➢ Diabetes	2.7x
➢ Cardiovascular disease	2.3x
➢ Respiratory disease	3.2x
➢ Infectious diseases	3.4x

Osby U et al. *Schizophr Res*. 2000;45:21-28.

Topics

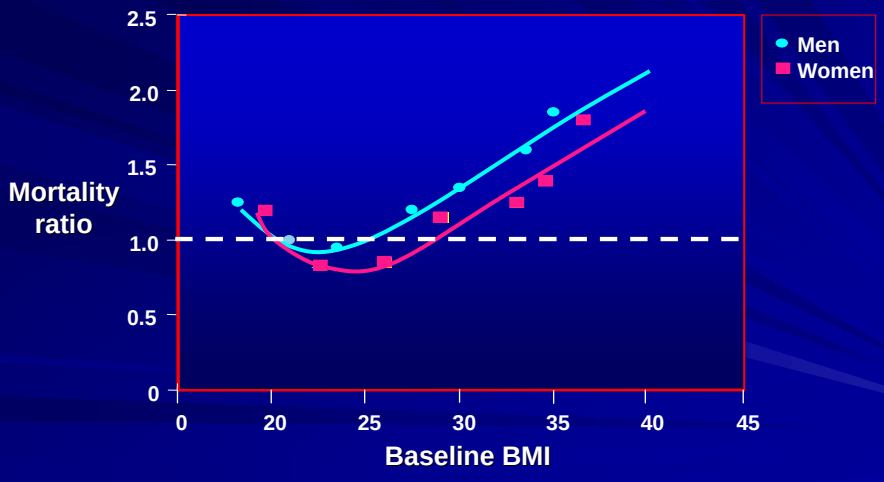
- Obesity
- Hypertension
- Diabetes Mellitus
- Cardiovascular Disease

BMI Distributions for General Population and Those With Schizophrenia (1989)



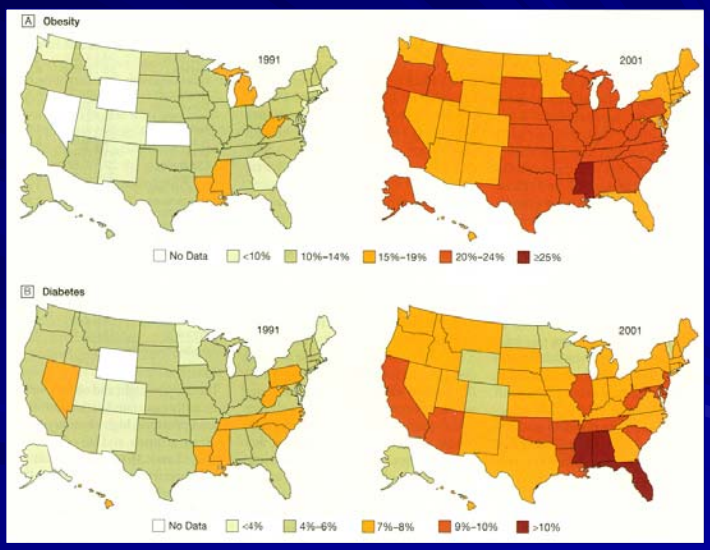
Allison DB et al. *J Clin Psychiatry*. 1999;60:215-220.

Obesity and Mortality



Lew H et al. *J Chron Dis*. 1979;32:563-576.

Increasing Prevalence of Obesity and Diagnosed Diabetes Among US Adults



Mokdad AH, et al. *JAMA*. 2003;289:76-79.

Health Benefits of Modest Weight Loss (5%-10%)

- Decreased blood glucose and insulin levels
- Decreased blood pressure
- Decreased LDL-C/triglycerides
- Increased HDL-C
- Decreased sleep apnea
- Reduced degenerative joint disease symptoms

National Heart, Lung & Blood Institute. 2001.

Topics

- Obesity
- Hypertension
- Diabetes Mellitus
- Cardiovascular Disease

Topics

- Obesity
- Hypertension
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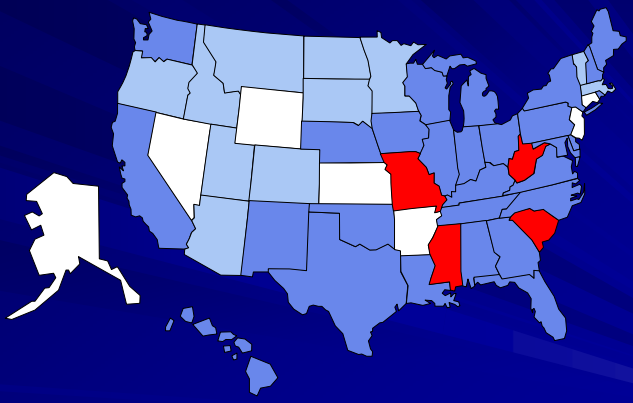
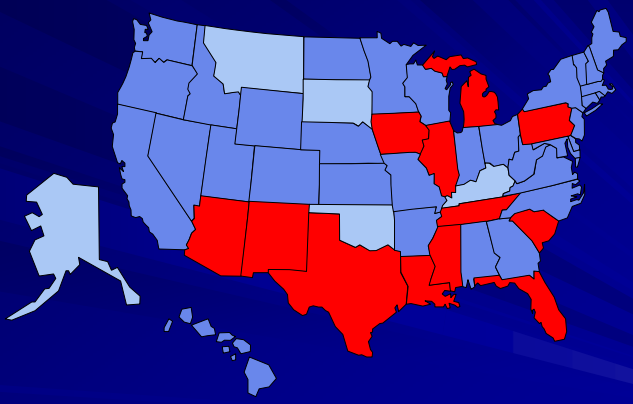
Diabetes and Gestational Diabetes Trends: US Adults, BRFSS 1990



No Data | Less than 4% | 4% to 6% | Above 6%

Mokdad et al. *Diabetes Care.* 2000;23:1278-1283.

Diabetes and Gestational Diabetes Trends: US Adults, BRFSS 1995



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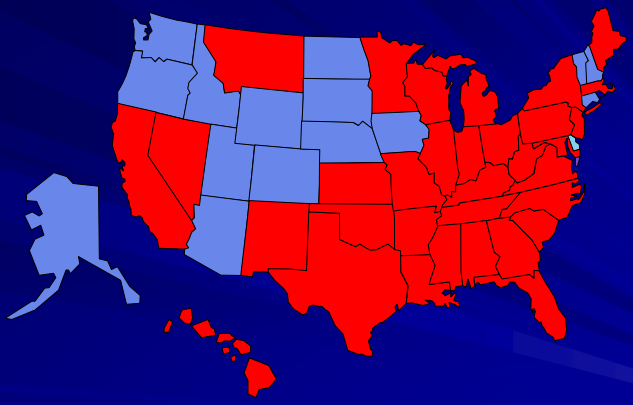
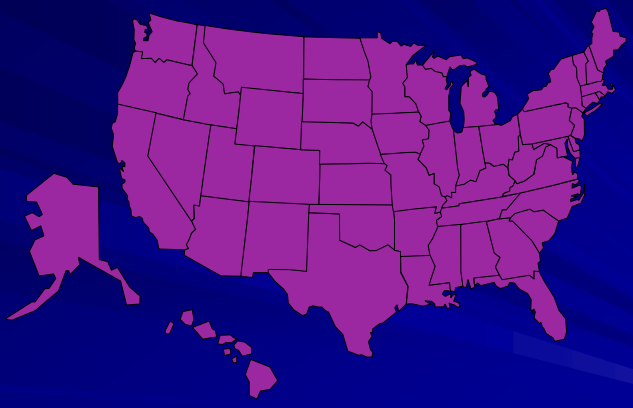


No Data | Less than 4% | 4% to 6% | Above 6%

Mokdad et al. *Diabetes Care.* 2001;24:412.

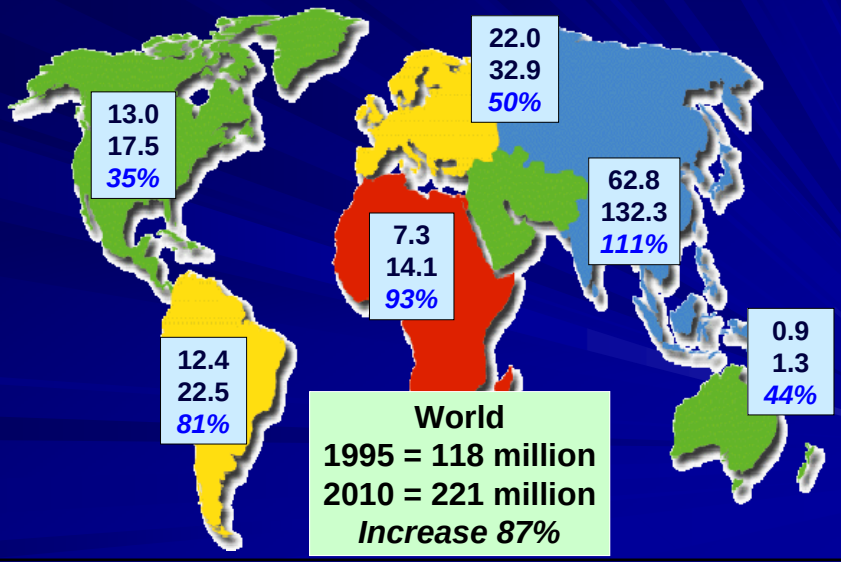
Diabetes and Gestational Diabetes Trends: US Adults, Estimate for 2010



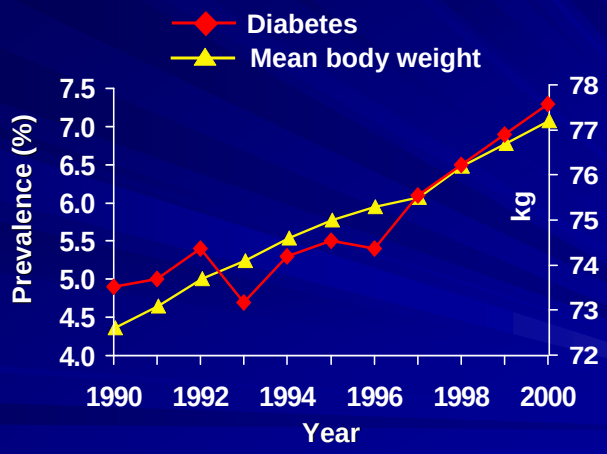
No Data | Less than 4% | 4% to 6% | Above 6% | Above 10%

www.diabetes.org.

Global Projections For The Diabetes Epidemic: 1995-2010 (millions)

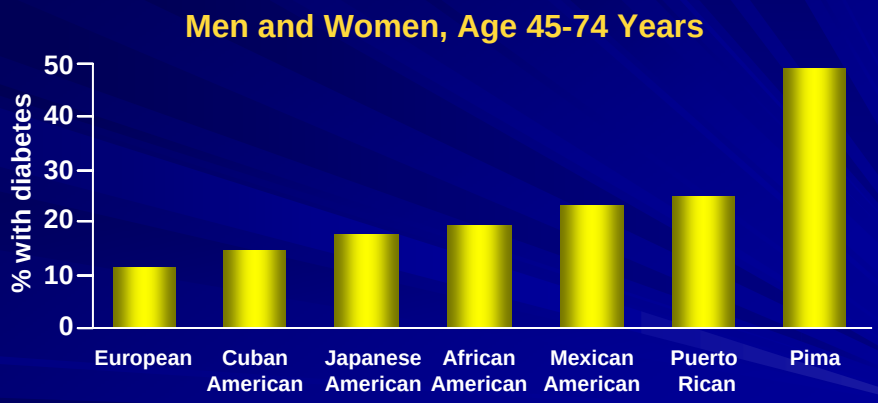


Diabetes and Obesity: The Continuing Epidemic



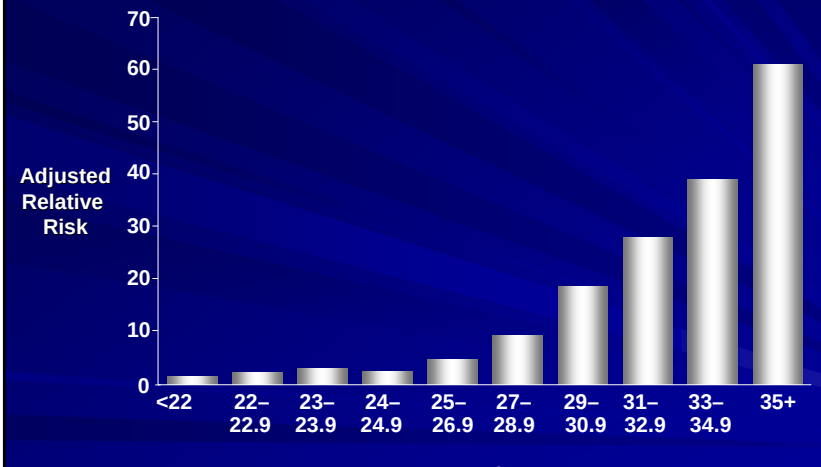
Mokdad et al. *Diabetes Care*. 2000;23:1278.
Mokdad et al. *JAMA*. 1999;282:1519.
Mokdad et al. *JAMA*. 2001;286:1195.

US Diabetes Prevalence by Ethnic Group



Harris et al. *Diabetes.* 1987;36:523.
Flegal et al. *Diabetes Care.* 1991;14(suppl 3):628.
Knowler et al. *Diabetes Care.* 1993;16(suppl 1):216.
Fujimoto et al. *Diabetes Res Clin Pract.* 1991;13:119.
Fujimoto et al. *Diabetes.* 1987;36:721.

Body Mass Index (BMI) and Relative Risk of Type 2 Diabetes



In women age 35-55 years in 1976; data adjusted for age.

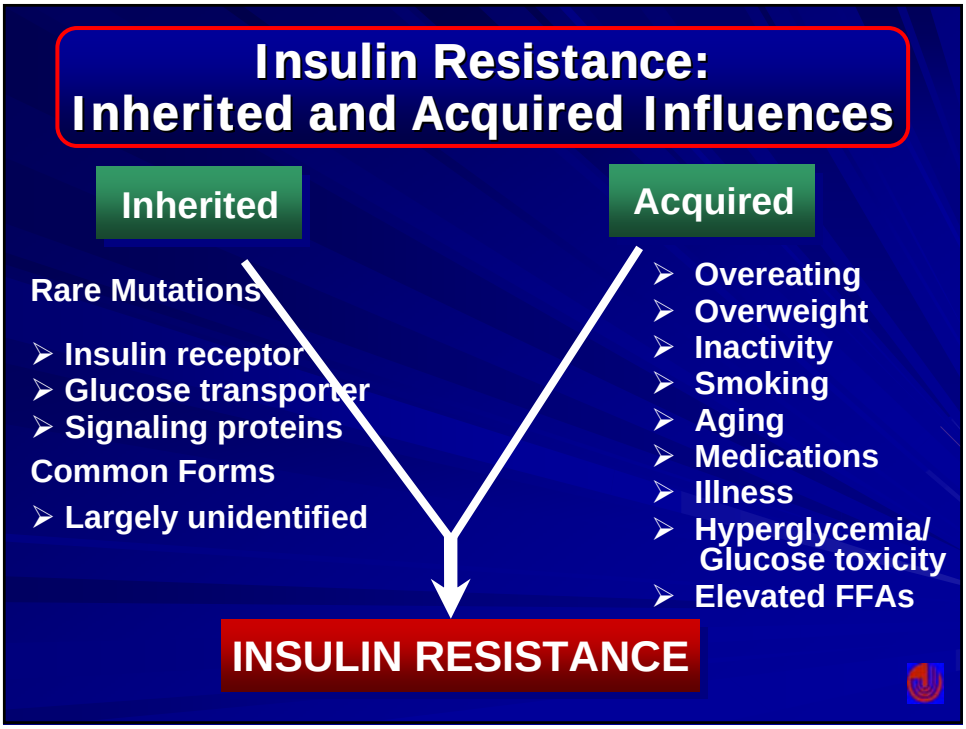
Adapted from Colditz et al. *Am J Epidemiol.* 1990;132:501-513.

Complications of Type 2 Diabetes in Minorities

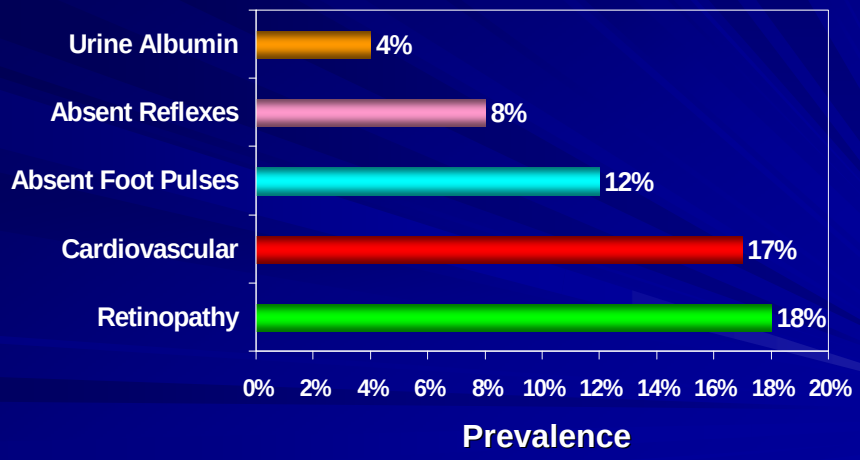
- Higher prevalence of chronic complications in minorities than in Whites:
  - lower leg amputations 2-4x
  - retinopathy and blindness 2-4x
  - stroke 2x
  - ESRD 4-6x
- Increased prevalence due to worse glycemic control, lower access and quality of diabetes care, cultural, social and perhaps, biological factors.

Caballero AE. Diabetes in minority populations.
In: Joslin's Diabetes Mellitus. LW & W; 2005. 14th Ed. p 505-524.

Insulin Resistance: Inherited and Acquired Influences



Prevalence of Diabetic Tissue Damage at Diagnosis of Type 2 Diabetes



Dagogo-Jack et al. *Arch Int Med*. 1997;157:1802-1817.

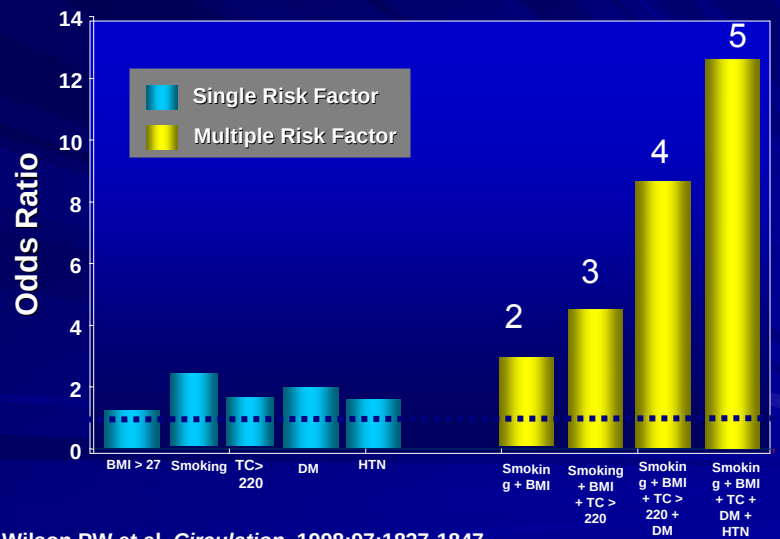
Topics

- Obesity
- Hypertension
- Diabetes Mellitus
- Cardiovascular Disease

Cardiovascular Disease (CVD) Risk Factors

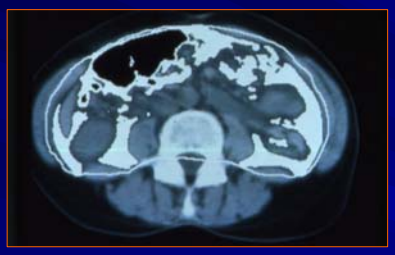
Modifiable Risk Factors	Estimated Prevalence and Relative Risk (RR)	
	Schizophrenia	Bipolar Disorder
Obesity	45–55%, 1.5-2X RR[1]	26%[5]
Smoking	50–80%, 2-3X RR[2]	55%[6]
Diabetes	10–14%, 2X RR[3]	10%[7]
Hypertension	≥18%[4]	15%[5]
Dyslipidemia	Up to 5X RR[8]	

Framingham Heart Study: CVD Risk with Multiple Risk Factors

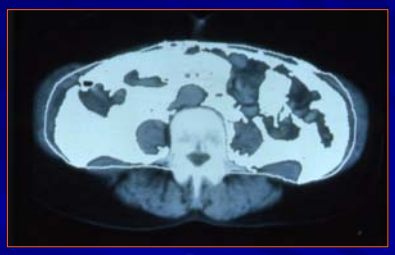


Wilson PW et al. *Circulation.* 1998;97:1837-1847.

Visceral Fat Distribution
Normal Versus Type 2 Diabetes



Normal



Type 2 Diabetes

16 State Mortality Study

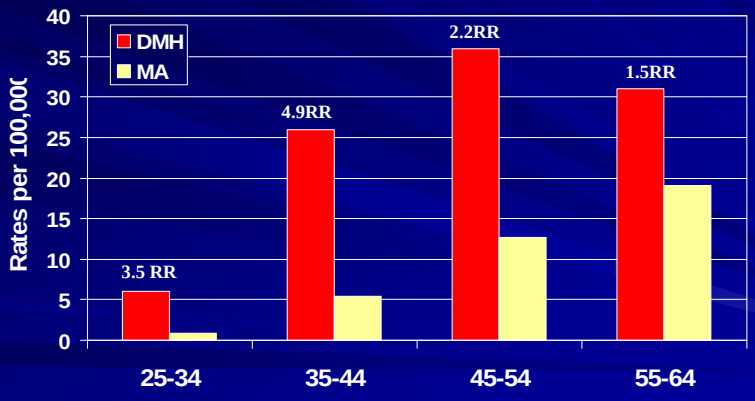
- 9 of 16 states submitted data
  - 8 of 16 had usable data
  - 7 states: both outpatient and inpatient
  - 1 state (VA) only inpatient
  - Age-adjusted Death Rate (AADR)

16 State Study Results: Years of Potential Life Lost

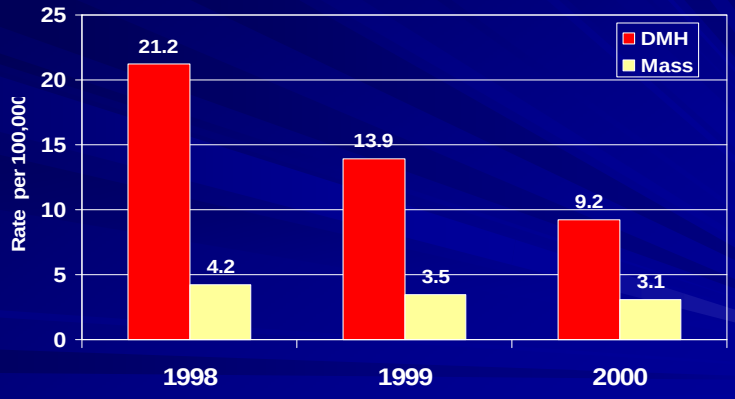
Year	AZ	MO	OK	RI	TX	UT	VA (IP only)
1997		26.3	25.1		28.5		
1998		27.3	25.1		28.8	29.3	15.5
1999	32.2	26.8	26.3		29.3	26.9	14.0
2000	31.8	27.9		24.9			13.5

- Previous research suggested that people with schizophrenia died 10 years *earlier than age-matched contemporaries*
- This data suggests that people with SMI are dying at least 25 years earlier

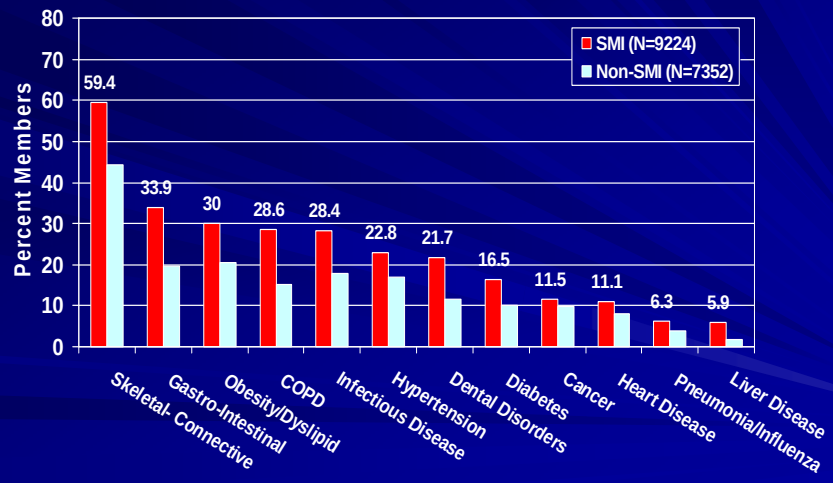
Massachusetts Study: Deaths from Heart Disease by Age Group/DMH Enrollees with SMI Compared to Massachusetts 1998-2000



Massachusetts Study: Mortality from Pneumonia/Influenza DMH clients, ages 25-64



Maine Study Results: Comparison of Health Disorders Between SMI & Non-SMI Groups



Ohio Study: Leading Causes of Death (Median age at death = 46)

Cause	%
Diseases of heart	20.7
Intentional self-harm (suicide)	17.8
Accidents (unintentional injuries)	13.7
Malignant neoplasms (cancers)	7.2
Symptoms, signs, & abnormal clinical & laboratory findings, NEC	5.3
Chronic lower respiratory diseases	5.1
Diabetes mellitus	3.0
Pneumonia & Influenza	2.6
Cerebrovascular diseases	1.6
Assault (homicide)	1.6

Ohio Study: Mean Years of Potential Life Lost

Cause	M	F	N
All	31.8	32.5	32.0
Intentional self-harm (suicide)	41.4	42.7	41.7
Assault (homicide)	42.3	35.8	41.6
Accidents (unintentional injuries)	39.5	43.1	40.4
Symptoms, signs, & abnormal clinical & laboratory findings,	32.8	35.0	33.4
Diabetes mellitus	25.8	37.2	30.2
Pneumonia & Influenza	29.4	25.0	28.3
Diseases of heart	27.7	26.6	27.3
Cerebrovascular diseases	20.7	32.8	25.5
Malignant neoplasms (cancers)	24.3	26.9	25.3
Chronic lower respiratory disease	18.6	24.1	21.1

Ohio Study: Interval From Discharge to Death

Characteristic	N	%
0-31 days	75	12.3
1-6 months	99	16.3
6-12 months	112	18.4
1-2 years	149	24.5
2-3 years	87	14.3
3-4 years	66	10.9
4-5 years	20	3.3

Ohio Study: Conclusion

- A significant number of patients who died did so within relatively short time frames following their last hospitalization.
- 35% of patients died between one and twelve months following discharge, and 59% of the deaths had been recorded by the end of the second year.

What are the Causes of Morbidity and Mortality in People with Serious Mental Illness?

- *While suicide and injury account for about 30-40% of excess mortality, about 60% of premature deaths in persons with schizophrenia are due to "natural causes"*
  - Cardiovascular disease
  - Diabetes
  - Respiratory diseases
  - Infectious diseases

Recommendations
LOCAL AGENCY / CLINICIAN

1. BH providers shall provide quality medical care and mental health care
   - Screen for general health with priority for high risk conditions
   - Offer prevention and intervention especially for modifiable risk factors (obesity, abnormal glucose and lipid levels, high blood pressure, smoking, alcohol and drug use, etc.)

Recommendations
LOCAL AGENCY / CLINICIAN

- Prescribers will screen, monitor and intervene for medication risk factors related to treatment of SMI (e.g. risk of metabolic syndrome with use of second generation anti-psychotics)

- Treatment per practice guidelines, e.g heart disease, diabetes, smoking cessation, use of novel anti-psychotics.

Recommendations
LOCAL AGENCY / CLINICIAN

2. **Support consumer wellness and empowerment to improve personal mental and physical well-being**
   - educate / share information to make healthy choices regarding nutrition, tobacco use, exercise, implications of psychotropic drugs
   - teach /support wellness self-management skills
   - teach /support decision making skills

LOCAL AGENCY / CLINICIAN
RECOMMENDATIONS

- motivational interviewing techniques
- Implement a physical health Wellness approach that is consistent with Recovery principles, including supports for smoking cessation, good nutrition, physical activity and healthy weight.
- attend to cultural and language needs

Recommendations
STATE LEVEL

Develop a quality improvement (QI) process that supports increased access to physical healthcare and ensures appropriate prevention, screening and treatment services.

- Target common causes of increased mortality and chronic medical illness in the SMI population
- Include all key stakeholders: state agencies, practitioners, individuals and their families, academic and training institutions in QI planning and review
- A key component : training and technical assistance for practitioners in both mental health and primary health fields

Goals: Lower Risk for CVD

- Blood cholesterol
  - 10% ↓ = 30% ↓ in CHD (200-180)
- High blood pressure (> 140 SBP or 90 DBP)
  - 4-6 mm Hg ↓ = 16% ↓ in CHD; 42% ↓ in stroke
- Cigarette smoking cessation
  - 50%-70% ↓ in CHD
- Maintenance of ideal body weight (BMI = 25)
  - 35%-55% ↓ in CHD
- Maintenance of active lifestyle (20-min walk daily)
  - 35%-55% ↓ in CHD

Hennekens CH. *Circulation.* 1998;97:1095-1102.

ADA/APA/AACE/NAASO Consensus on Antipsychotic Drugs and Obesity and Diabetes: Monitoring Protocol*

	Start	4 wks	8 wks	12 wk	qtrly	12 mos.	5 yrs.
Personal/family Hx	X					X	
Weight (BMI)	X	X	X	X	X		
Waist circumference	X					X	
Blood pressure	X			X		X	
Fasting glucose	X			X		X	
Fasting lipid profile	X			X		X ←	X

*More frequent assessments may be warranted based on clinical status

***Diabetes Care.* 27:596-601, 2004**

What can we do?

- Encourage a vision of integrated care
- Support Education and Advocacy
- Insure appropriate prevention and screening
- Encourage people as equal partners in treatment
- Understand the hopeful message of recovery

Encourage a Vision of Integrated Car

"Recovery encompasses an individual's whole life, including mind, body, spirit and community."

SAMHSA's consensus statement on recovery

Encourage a Vision of Integrated Care

Developing awareness of the report within self help groups and recipient run programs

Support Education & Advocacy

Creating & circulating resource toolkits for psychiatric centers, clinics, family groups and self help groups

Ensure Appropriate Prevention & Screening

Broadening the scope of prevention and screening tools to include somatic issues

Engage People as Equal Partners in Treatment

Common Ground

A peer to peer workshop that takes individuals through a process of self reflection that helps them to identify their personal medicine and their goals, resulting in their ability to become more effective partners in their treatment.

(Pat Deegan, Ph.D.)

Understand the Hopeful Message of Recovery

Personal Medicine

Our personal medicine helps us cope with our distress, gets us through the hard times, and keeps us in the community and out of the hospital.

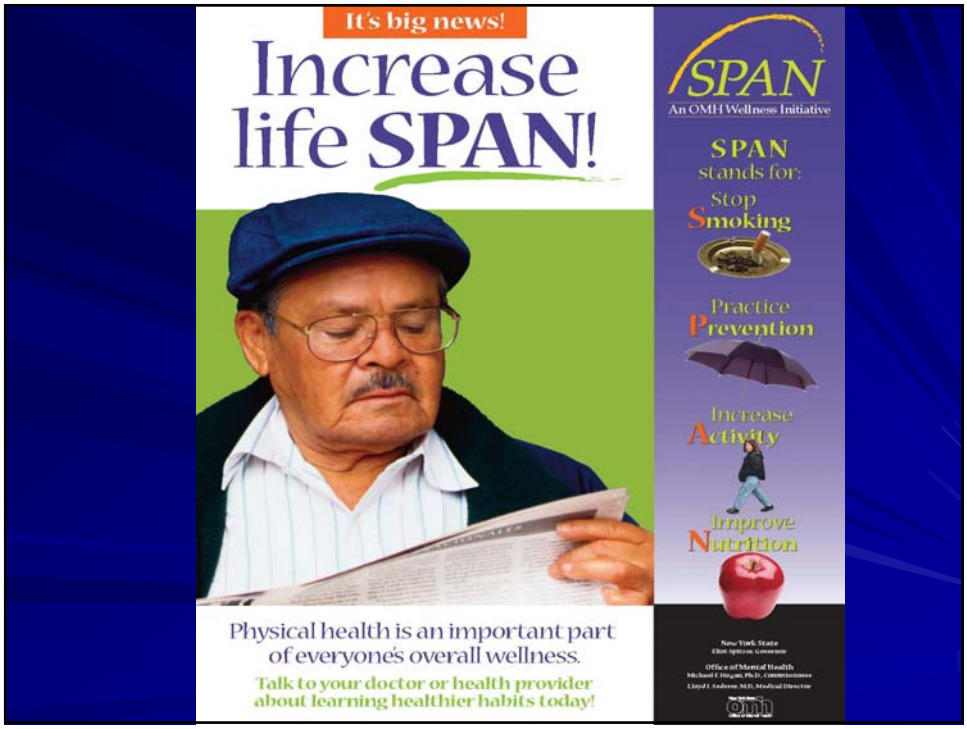
(Pat Deegan, Ph.D.)

Pursue Person Centered Care

Self Directed Recovery & the Role of the Mental Health Professional

A workshop for providers that offers specific tools and resources that can assist in the creation of a relationship with recipients that is central to their self directed recovery and personal medicine.

(Pat Deegan, Ph.D.)



S – Smoking Cessation
P - Prevention
A – Activity
N – Nutrition

Smoking Cessation

- 50% - 70% Reduction in Coronary Heart Disease
- New Medications to help people quit
- NYS Smoking Quit Line and other help available

Prevention

- Consider keeping a health diary
- Know your readings
  - Weight
  - BMI
  - Blood Pressure
  - Cholesterol
  - Blood sugar
- Know when to get tested and ask for the test
- Become a partner in your treatment

Activity

- Physical activity has numerous benefits to physical and mental health
- Make it part of what you enjoy doing
- Increase the amount of walking you do to at least 20 minutes, 3 times a week
- Make decisions and create reminders for “point of decision”

Health Benefits of Modest Weight Loss (5%-10%)

- Decreased blood glucose and insulin levels
- Decreased blood pressure
- Decreased LDL-C/triglycerides
- Increased HDL-C
- Decreased sleep apnea
- Reduced degenerative joint disease symptoms

National Heart, Lung & Blood Institute. 2001.

Nutrition

- Eating healthy can help reduce weight and risk for high blood pressure, coronary hearth disease, diabetes and other complications
- Eat more fruits and vegetables

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- Please include the following:
- The name of the poster: LifeSPAN
- The amount you need. (Minimum of 25)
- Your STREET address. (No PO Boxes)
- The contact person or Department Name.

Clarity of Issue

People with serious mental illness served by our public mental health systems die, on average, at least 25 years earlier than the general population.

NASMHPD 16 state study

Lets enjoy our Recovery

- Take the steps to help yourself live longer to enjoy the hard work of your recovery
- Help inspire others
- Support each other in our efforts

To be added to the OMH LifeSPAN listserv please send an e-mail with your e-mail address and your first and last name to:
public_announcements@omh.state.ny.us