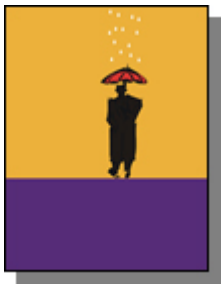
Depression: The Unwanted Cotraveler A Day for the Public



Introduction

It was a sunny day in Pittsburgh, Pennsylvania, when the National Institute of Mental Health (NIMH), the Federal agency responsible for the Nation's mental health research, held the fourth of a series of trail-blazing mental health forums on March 26, 2001. But for the 400-plus people, including a small group of whom journeyed from Minnesota, the opportunity to discuss the impact of depression and its co-occurrence with other illnesses, and to help NIMH formulate its research agenda on depression meant that the weather was no impediment to a day of lively, informative discussions.

The NIMH organized ***The Unwanted Cotraveler: Depression's Toll on Other Illnesses*** to brief the public about improving health outcomes for major diseases such as cancer, diabetes, heart disease, stroke, HIV/AIDS, and Parkinson's disease through the effective treatment of co-occurring depression. In addition, the public was invited to participate in breakout sessions that would allow for more intensive discussions of research and educational efforts needed to improve care and health outcomes. Discussion topics were to include:

- What steps can be taken to improve recognition and treatment of depression in general health care settings?
- What is the role of medication and other therapies for people with co-existing illnesses? How do the effectiveness and appropriateness of these treatments vary depending upon the co-existing illness?
- How does treating depression improve health outcome and quality of life for patients? What are the biological and psychosocial mechanisms underlying these changes?
- When symptoms of depression emerge in the context of another illness, how does early preventive intervention benefit the patient?
- How can the provider/patient interaction be improved to foster better care for people with depression and a co-existing illness?
- What are the additional costs of treating depression and not treating depression for health care agencies and businesses?

On the morning of the meeting day, during the forum's plenary sessions, the capacity audience heard presentations from scientists, physicians, patients, and the Honorable Arlen Specter, U.S. Senator representing Pennsylvania, about various real-life aspects of depression and its impact on other diseases. Each speaker then had time to entertain questions from the audience. After a rousing lunchtime speech by the Honorable Patrick J. Kennedy, U.S. Representative from Rhode Island, the forum attendees sat in on various breakout groups charged to develop action plans for developing necessary NIMH research, creating helpful educational/communication materials, and designing the next steps for working together.

The Pittsburgh forum, ***The Unwanted Cotraveler: Depression's Toll on Other Illnesses***, was the first NIMH forum designed to seek input from members of the public on shaping the Institute's future research activities in the area of affective disorders. The Institute chose Pittsburgh because it is home to a major core of mental health research and treatment centers, and to consumer and mental health advocacy organizations.

NIMH worked closely with consumer and professional organizations, universities, and State and local agencies, including the Jewish Healthcare Foundation and the University of Pittsburgh, to plan ***The Unwanted Cotraveler: Depression's Toll on Other Illnesses***, and to promote an open sharing of ideas and expertise. Dr. David Kupfer, Thomas Detre Professor and Chairman, Department of Psychiatry, University of Pittsburgh Medical Center, served as chairperson for the event. Individuals with affective disorders, as well as with other medical diseases that are often accompanied by depression, family members, care providers, policymakers, and researchers were invited to help set NIMH's research priorities. The forum generated key ideas and questions that will inform NIMH's research priorities and enhance that research's relevance to America's mental health needs.

A. Improving Health By Treating Depression

"What NIMH is doing in terms of identifying depression as a co-factor [in other diseases] could be so helpful in helping us educate the public on the true role that depression plays in health care." - Charles Curie, Deputy Secretary, Office of Mental Health and Substance Abuse Services, Pennsylvania Department of Public Welfare

Given the title of the Pittsburgh forum, one of its goals was to address the increasingly recognized role that affective disorders, particularly depression, can play in the cause, progression, and rehabilitation of many physical ailments. People living with cancer, diabetes, heart disease, stroke, HIV/AIDS, Parkinson's disease, and other major illnesses may be fighting depression as well. Research has shown that treatment of co-occurring depression can often improve health outcomes for many people with a wide variety of diseases.

Not only may relief from depression help a person adhere to complex treatment plans and improve their quality of life, but researchers are tracing the biological aspects of depression at the physiological and cellular levels that could affect these other illnesses. For example, depression alters various neurotransmitters that are critical to the progression of Parkinson's and other neurological diseases. In addition, depression induces stress hormones that can affect the cardiovascular system and that are associated with changes in platelet function that may be important in people who have heart disease. Depression's physiological effects may also include the suppression of the immune system, which may adversely alter the course of cancer and HIV/AIDS. The interconnections go on, with studies linking depression and obesity and diabetes, as well as intriguing findings showing common genetic patterns in diabetes and depression.

Depression, alone or co-occurring with another illness, is a treatable disorder. With proper treatment, nearly 80% of those with depressive illness can feel better, and most within a matter of weeks. Current treatments provide relief from depression's symptoms, which include sadness, loss of interest or pleasure in activities that were once enjoyed, change in appetite or weight, difficulty sleeping or oversleeping, physical slowing or agitation, energy loss, feelings of worthlessness or inappropriate guilt, difficulty thinking or concentrating, and recurrent thoughts of death or suicide.

B. The Depression Epidemic and Its Toll

"Our work to bring more effective treatment to more people is, in the finest American tradition, an effort to promote opportunity. It is extending the American dream to those who have had difficulty seeing its promise." - Hon. Patrick J. Kennedy, U.S. Representative from Rhode Island's First District

Each of the forum's first three speakers—meeting chair Dr. David J. Kupfer of the University of Pittsburgh, Pennsylvania Deputy Secretary of Public Welfare Charles Curie, and NIMH Director Dr. Steven E. Hyman—spoke to the enormous burden that mental illness in general, and mood disorders in particular, places on individuals, their families, and society at large. Dr. Kupfer began the forum by presenting some facts from the World Health Organization report on the global burden of disease: unipolar or major depression is the fourth leading cause of disability (measured in

Disability-Adjusted Life Years) in the world, and by the year 2020, it will be second only to ischemic heart disease. If nothing is done, unipolar depression will be the leading cause of disability among women worldwide by 2020. Worse yet, these figures do not take into account that between 40-65 percent of patients who have had a heart attack also suffer from major depression, as do approximately 25 percent of cancer patients, and between 10-27 percent of patients who have had a stroke.

What's the economic cost of this epidemic? Dr. Kupfer presented data generated by University of Pittsburgh colleague Dr. Judith Lave showing that the impact of these co-existing conditions is a great economic cost to our health system.

Mr. Curie then spoke to an issue that came up many times throughout the forum—the penalty paid for society's continuing to treat mental illness as something different than all other "physical" illnesses. Citing the stigma that is often associated with depression, Mr. Curie said the only way to change that attitude, both among the public and policymakers, is with solid scientific data. He told the forum attendees that strong data, generated from research programs funded or directed by NIMH, were the key factor in Pennsylvania's decision to aggressively fund mental health care as part of the State's Medicaid program.

But now, he added, it is time for everyone connected with the Nation's health care system—patients, relatives, physicians and policymakers—to develop new strategies to translate available data to educate the public and eliminate the stigma that arises solely from ignorance about depression and other mental disorders. In Pennsylvania, this means redoubling efforts to realize the state's vision concerning mental health: that every citizen of the state with serious mental illness and/or addictive disease and every child and adolescent who abuses substances and/or has a serious emotional disturbance will have the opportunity for growth, recovery, inclusion in the community, access to services and supports of their choice, and enjoy a quality of life that includes family and friends.

C. The Many Links Between Depression and Illness
"We have tragically separated body and mind in our society." - Dr. Steven E. Hyman, Director of NIMH

Dr. Hyman finished the introductory talks by reviewing some of the research that points to the connection between depression and other illnesses. First, he discussed some recent work showing that depression is a brain disorder, just as diabetes is an illness of the pancreas. NIMH's long-term support of basic research has shown, for example, that over-activation of the body's stress response system—a physiological response seen in depressed patients—can actually induce changes in the regions of the brain that appear to be affected in depression. One particular region that is affected, known as the hippocampus, is crucial for forming memories, and other NIMH-funded research has shown that this part of the brain can show signs of regeneration—but perhaps not complete recovery when the brain is exposed to abnormally high levels of stress hormones. "We're beginning to see how depression, which used to be thought of as an ephemeral, emotional aspect of life, is actually a brain disease profoundly affecting physiology, including the structure of the brain," said Dr. Hyman. "And, of course, these very same stress hormones have a very important relationship in depression and diabetes, where they alter metabolism, and in depression and cardiovascular disease, for example."

Dr. Hyman also told the audience that affective disorders may take on different forms at different times of life, and that these changes can alter the way major depression and bipolar illness manifest their impact on other illnesses. Early in life, for example, depression has a profound impact on illegal substance abuse by adolescents, and teasing out the details of this connection is an important priority to NIMH, for depression also affects an adolescent's ability to learn and succeed in school. Later in life, medical conditions such as stroke, heart attack, and Parkinson's disease become far more common, and there is a great need to understand how these conditions either increase the risk for depression or trigger its onset. For example, researchers would like to know how much of that connection results from the fact that a depressed person has difficulty engaging in their rehabilitation and taking their medications, and how much arises from the actual pathologic physiology that occurs in depression. These are among the many questions that continued research will address.

The Mental Health Challenge in the Nation

The Honorable Arlen Specter, U.S. Senator from the state of Pennsylvania, and the Honorable Patrick J.

Kennedy, U.S. Representative from the state of Rhode Island, each spoke to the forum, offering their perspectives on the mental health challenges faced by this Nation.

In his presentation, Senator Specter was adamant in stating his belief that insurance coverage for mental illness should be on par with that afforded for physical ailments. He stated that now is the time for government to take a leadership role, rather than leaving this matter to market forces.

The Senator also highlighted the $2.1 billion dollar increase over the past two years to support work to combat youth violence and the role that NIMH must play in this important task. He said that measures to prevent youth violence have to include identifying those adolescents who are most at risk, and since depression and other mental and behavioral disorders are such important risk factors in youth violence, this effort must include the mental health care profession, both practitioners and researchers. He added that it was simplistic to blame youth violence on television and movies.

Finally, the Senator called on the audience to communicate with their elected officials, himself included, to ensure that Federal dollars can continue to fund research using human stem cells from embryos. Such research, he said, is critical in areas such as mental illness and Parkinson's disease. He has introduced legislation that would expand such research, allowing Federal funds to be used to extract stem cells from embryos that were created for *in vitro* fertilization and that are slated to be destroyed.

Representative Kennedy stressed the urgency to reform the availability and delivery of mental health services for *all* citizens. With the development of new therapies and preventions for mental illness, and expanded access to both preventive services and treatment, the Nation will open doors to a better future for those who are afflicted with mental illness, including the speaker himself, who receives therapy for major depression. Such efforts, he said, are in the best American tradition of widening the circle of opportunity to include an ever-greater number of our Nation's citizens. In this context, Representative Kennedy applauded NIMH's increased emphasis on translational research, adding that little will be accomplished without the strong connection between the laboratory and the clinic that NIMH is promoting as an integral part of its research effort.

But the bulk of his talk had to do with what must be one of the biggest barriers to improved health care for patients with mental illness—stigma. Representative Kennedy told a personal story about his own experiences with depression and with stigma. The practical effects of this stigma are legion, he continued. One example is the limited mental health care training that primary care physicians receive while in medical school. It is unforgivable, he said, that every medical school does not train every student to be able to reliably diagnose mental illness. It is also untenable that mental health care is not fully integrated into all communities and institutions, including our Nation's elder care facilities, our prisons, and particularly our schools. "Why are we waiting so long [to reach children with mental health problems]," asked Representative Kennedy, when all this delay does is make life harder for the child, and eventually, more expensive for society.

The Advocate's Perspective

Two members of the mental health advocacy community addressed the forum. Ms. Lydia Lewis, Executive Director of the National Depressive and Manic-Depressive Association (NDMDA), spoke first. She was followed by Mr. Jeffrey C. Martin, J.D., an advocate for the Parkinson's disease community.

Ms. Lewis, speaking on behalf of the 23 million Americans currently coping with mood disorders, began by thanking NIMH, and Dr. Hyman specifically, for the Institute's commitment to finding better screening tools, better treatments, ways to limit risk factors, and particularly "listening intently to those of us trying to get through life with a mood disorder." She also applauded the Institute's current priorities, but called for a significant increase and acceleration of research to end the suffering that comes with mood disorders, not only from the symptoms of these illnesses, but the stigma and discrimination surrounding them. Ms. Lewis pointed out how unaware both the public and the medical profession are of the symptoms of mood disorders. Drawing an analogy with the successful campaign waged by the American Cancer Society to educate the public about the seven warning signs of cancer, she promoted the idea of a similar large-scale public-education effort to raise awareness of the most common signs of depression and mania.

On a day when the audience heard some chilling statistics about the prevalence of mood disorders, Ms. Lewis

may have presented the most concerning of all—based on a recent survey conducted by the NDMDA, 78 percent of Americans with depression have not experienced complete control of their illness within the past two months. "If a chronic illness such as diabetes wasn't completely controlled for three-quarters of diabetics, there would be a public outcry," she stated. "How come we are all so silent when it comes to depression? Despite all the excellent work done at NIMH and by researchers in universities across the United States, if people and their doctors can't recognize the symptoms of depression or if people refuse to get treatment, depression will remain highly undiagnosed and untreated." Ms. Lewis placed much of the blame for this critical situation square on the shoulders of stigma—because of stigma, Americans are reluctant to see a mental health care professional, to take mood-stabilizing medication, to getting help in the face of such devastating diseases.

Even when those with mood disorders can afford help and seek it, their treatment often is less than optimal. According to the National DMDA survey, nearly half of all patients reported having problems with medication side effects. Furthermore, more than half of all patients had stopped taking an antidepressant because of side effects, while another third of the patients reported that side effects caused them to change the way they took their medication. For the vast majority of these people, a change in medication or dosage can eliminate or reduce these side effects, a message that physicians are failing to convey to their patients. Ms. Lewis called for a renewed effort to educate both physicians and the public that mood disorders are treatable, but only if patients and doctors form a partnership to ensure that treatment success is measured by complete symptom relief and minimal side effects.

Mr. Martin addressed the forum to provide a patient's perspective on the relationship between depression and Parkinson's disease. Though there are many symptoms of Parkinson's disease—tremor, slowness in initiating movement, stooped posture, balance problems and sometimes cognitive deficits—that adversely affect many aspects of daily life, the symptom with the worst effect on quality of life is major depression. Some studies suggest that more than 30 percent of Parkinson's disease patients suffer from major depression.

Clinical depression may be an early warning sign of Parkinson's disease. It often appears before movement disorders, and in fact, it may be part of the neurodegenerative process. Mr. Martin suggested that NIMH and its sister institute, the National Institute of Neurological Disorders and Stroke (NINDS), should fund a study to see if imaging techniques capable of assessing dopamine transport in the brain might offer the possibility of early detection of both Parkinson's disease and depression. Early detection, he added, might permit early intervention with potential neuroprotective agents.

The connection between Parkinson's disease and depression is more complicated, however. On the one hand, the diagnosis of Parkinson's disease can trigger depression, and though this is understandable it is no excuse not to treat the depression. On the other hand, Parkinson's disease reduces facial expressions, which may give people the appearance of being depressed even if they are not. Physicians, then, must carefully assess their patients before making a diagnosis of depression. In addition, some treatments for Parkinson's disease can cause depression, and conversely, certain antidepressants and antipsychotic drugs can exacerbate the symptoms of Parkinson's disease. He called for NINDS to cooperate with NIMH efforts to test novel antidepressants for use by patients with Parkinson's disease.

More importantly, he said, depression can reduce the patient's responsiveness to anti-Parkinsonian medications such as L-dopa. While many physicians may respond to this by increasing the dosage of anti-Parkinsonian medication, treating the depression can have the same effect. Given that the long-term treatment of Parkinson's disease is better if an L-dopa-sparing medication strategy is used, getting rid of this debilitating and unwanted co-traveler is imperative.

Finally, Mr. Martin called for breaking down "the artificial barriers between neurodegenerative disease and mental health." To help this process, he suggested that the NIH should develop "thoughtful disease-specific [research] plans."

The Human Face of Affective Disorders

One of the forum's speakers addressed some of the real-life issues that come with depression. Dr. Robert L. Johnson, Director of Adolescent Medicine in the Department of Pediatrics, New Jersey Medical School, University of Medicine and Dentistry of New Jersey, talked about depression and its impact on adolescent risk

taking.

In his presentation, Dr. Johnson began by describing one of the main traits of adolescence-risk taking. It usually begins around age 15, when most adolescents suddenly believe they are wrapped in a suit of armor. "That armor consists of a helmet of omniscience, and when they put that on, they know everything; the breast plate of omnipotence that makes them all powerful; and the shield of invisibility that protects them from everything the world can throw at them," said Dr. Johnson. "Now, this armor of middle adolescence is very important because it allows us to move from out under the structure that nurtured us and supported us in our childhood, usually our families, into a world where we are defenseless. At the same time, it allows a teenager to take some risks, and hopefully that risk taking will be constructive risk taking, like simply deciding to stay out late. However, for a large portion of young people in this country, it can result in destructive risk-taking."

Destructive risk-taking behavior can become more dangerous, added Dr. Johnson, when coupled with depression in an adolescent, for it can lead to the kind of violent behavior and delinquent behavior that often leads to involvement of the criminal justice system. While this may temporarily solve the problem of what to do with an "angry" adolescent, it does nothing to address the root problem, depression. He called for the development of new strategies to achieve effective prevention and early intervention for depression among adolescents, but particularly for recognition of the problem by schools, parents, and primary care providers, "to tease through the destructive acting out behavior and find depression."

Once it is recognized, said Dr. Johnson, then there has to be some type of treatment delivered, as well, from effective therapy for the depression as well as the acting-out behavior. "It's surprising to me that we don't do more about this in the juvenile justice setting because I would venture to guess that in most juvenile detention facilities, fully 90 percent of the young people who are there have depression as a co-morbid condition to their delinquency, yet we usually do very little about depression, and simply just keep them away from society for a long time and expect that time will cure the problem." However, he added, time doesn't cure the problem of depression. "The depressed adolescent who is acting out at 15 and destroying your community will become a depressed adult who at 35 is acting out and destroying your community in a much more serious way."

Depression and General Medicine

Dr. Steven A. Schroeder, president of the Robert Wood Johnson Foundation and a practicing internist, spoke about some of the obstacles that often prevent primary care physicians from diagnosing depression as a co-morbid condition with other illnesses. One of the biggest obstacles, he said, is time. While a typical mental health care appointment lasts 50 minutes, primary care physicians spend an average of 15 minutes with a patient. Modern-day pressures inherent in a fee-for-service insurance reimbursement environment discourage the general practitioner or internist from spending the time needed to make a diagnosis of depression. And even in the instances when such diagnoses are made, there is so little communication between primary care physicians and mental health care specialists that patients referred for treatment often "drop into a black hole." While recognizing that there are important issues of confidentiality, psychiatrists must at least provide feedback on medication and frequency of therapy.

Dr. Schroeder did note that advertising has seemed to alleviate some of the stigma that drives patients away from acknowledging that they have depression and need treatment. Still, he added, most patients want to consider depression as the last thing they want to explore as a possible explanation for their symptoms. And even then, many patients just want a quick prescription fix rather than thorough treatment for their depression.

Finally, Dr. Schroeder reiterated earlier comments that internists and general practitioners need better mental health care training that begins in medical school and continues throughout a physician's career. But he also repeated his call for better communications between mental health care experts and general medical doctors. "We need to let the walls between these two communities, which have been up for 40 to 50 years, come down. We need to work together better," he said.

Research Agenda from the Breakout Groups

In the afternoon breakout groups, focusing on depression as it co-occurs with cancer,

diabetes, cardiovascular disease and stroke, HIV/AIDS, and Parkinson's and other neurological disorders, NIMH's stakeholders had the opportunity to provide direct input on the future directions of NIMH research. The topics for the groups were determined by the participants, but guided by key Pennsylvania and national opinion leaders in advocacy, research, service and State government who served as group facilitators. In his charge to the breakout groups, forum chair Dr. David J. Kupfer said their purpose was to consider how NIMH can use the knowledge gained from research to make a difference in people's lives.

Each group began with a short introduction by the facilitators, short presentations by researchers expert in the illness of focus in the group, and then encouraged free-flowing discussion by the participants. A special expert was also available to each group to answer questions that arose during the discussion. For most of the nearly 1.5 hour sessions, the facilitators stepped in only to answer questions about NIMH and to summarize key points in the discussions. At the end of each session, the facilitators oversaw a group process that led to a manageable list of specific recommendations for NIMH research policy setting. Those lists follow below.

A. Cardiovascular Disease

Facilitator: Ms. Patricia Fenton, American Heart Association. Presenter: Dr. Dennis Charney, NIMH Intramural Research Program. Special Expert: Dr. Charlotte Brown, University of Pittsburgh Medical Center

Recommendations:

- Continue and increase all avenues of research, but particularly in the area of translational research and identifying risk factors for mood disorders among patients with cardiovascular disorders. In addition, there was a suggestion to study the barriers to performing this kind of cross-disorder research.
- Increase integration of research efforts by NIMH and other NIH institutes that study cardiovascular diseases.
- Increase awareness about depression and mood disorders among physicians who treat patients for cardiovascular disease, and among patients with cardiovascular disease.
- Study the feasibility of integrated health care models, which foster improved communication among mental health care practitioners and primary care physicians, and ready access to information about depression for patients and their family members.

B. Parkinson's Disease and Other Neurological Disorders

Facilitator: Dr. Susan Baser, Allegheny Neurological Associates. Presenter: Dr. William McDonald, Emory University School of Medicine. Special Expert: Dr. Michael Zigmond, University of Pittsburgh Medical Center

Recommendations:

- Develop objective measures of clinical symptomatology to help differentiate between depression, Parkinson's disease, and Parkinson's disease with depression.
- Investigate the role of dopaminergic and non-dopaminergic neurotransmitter systems in the basic pathophysiology of Parkinson's disease and differentiating that from the role that these systems play in depression.
- Develop biochemical markers of depression as an early indicator of Parkinson's disease.
- Study the difference in outcome in the treatment of the depression with Parkinson's in HMO versus non-HMO patients.
- Determine if there are outcome differences related to the specialty of the physician who treats depression in Parkinson's patients.
- Conduct clinical trials with atypical antidepressant medications to determine if any of these agents can more safely and effectively treat depression specifically in Parkinson's disease patients.
- Identify ways of teaching patients and their families to better manage both Parkinson's disease and depression.

- Develop ways of measuring patient compliance with recommended treatments to determine if patients reliably follow through on their therapies.
- Compare the effectiveness of low-cost versus high-cost therapies.
- Compare pharmacological versus non-pharmacological therapies for treating depression in patients with Parkinson's disease and other neurological disorders.
- Improve physician training to increase their ability to diagnosis depression in patients with neurological disorders.

C. HIV/AIDS

Facilitator: Robert Feikema, Pittsburgh AIDS Task Force. Presenter: Dr. Robert L. Johnson, New Jersey Medical School. Special Expert: Dr. Holly Swartz, University of Pittsburgh Medical Center

Recommendations:

- Study the interactions between antidepressant medications and anti-HIV drugs.
- Develop new outreach programs to increase the use of mental health care services by patients with HIV/AIDS and determine if there is a disconnect between patient perceptions of services they need and the services that are available for them.
- Determine if new outreach approaches are needed to reach adolescents with HIV/AIDS and provide them with needed mental health care services.
- Study the special mental health services needs of African Americans and women with HIV/AIDS and determine if there are unique barriers to accessing such services among these populations.
- Examine the psychosocial factors that discourage patients with HIV/AIDS from seeking out and receiving needed mental health care.
- Encourage more integration of health care services for patients with HIV/AIDS to ensure that these patients receive any needed mental health care.
- Study the co-occurrence of HIV/AIDS with hepatitis B and hepatitis C as well as with depression and other mental disorders.
- Study the double stigma confronting patients with both HIV/AIDS and depression and determine if this adversely affects therapeutic compliance.

D. Cancer

Facilitator: Dr. Gail Mallory, Oncology Nursing Society. Presenter: Dr. Andrew Baum, University of Pittsburgh Medical Center Special Expert: Dr. M. Katherine Shear, University of Pittsburgh Medical Center

Recommendation:

- Develop methods to prevent depression in cancer patients and among their family members and caregivers.
- Study whether current diagnostic methods are sufficiently powerful to distinguish between the symptoms of cancer or the side effects of cancer therapy and the depression that can co-occur with cancer and cancer therapy.
- Increase awareness among physicians, patients and support groups about the co-occurrence of depression and cancer, and examine the role that a patient advocate might play in the total care of a patient with cancer.
- Develop treatment guidelines, including medication recommendations and contraindications, useful for physicians treating cancer patients and consider creating training methods about mental health problems for physicians who treat patients with cancer.
- Conduct longitudinal research to determine the effectiveness of various mood disorder therapies among different cancer patient populations and subgroups.
- Create a better working partnership between NIMH and the National Cancer Institute.

E. Diabetes

Facilitator: Annette Green, Pittsburgh Foundation. Presenter: Dr. Mary Korytkowski, University of Pittsburgh

Center for Diabetes and Endocrinology Special Expert: Dr. Michael Thase, University of Pittsburgh Medical Center

Recommendations:

- Develop strategies to increase access to mental health care by patients with diabetes, particularly by increasing awareness among physicians of the prevalence of depression in patients with diabetes.
- Improve the translation of research findings into clinical practice.
- Increase awareness across the continuum of diabetes care that "food is mood," and the impact of this on the occurrence and treatment of depression among diabetics.
- Increase communications among physicians who treat diabetes and those who treat the co-occurring depression.

Summary

Based on the reaction of the audience, ***The Unwanted Cotraveler: Depression's Toll on Other Illnesses*** would have to be judged a success. Participation in both the question and answer sessions after each plenary session speaker and in the breakout groups was lively. More importantly, however, the breakout groups were able to generate specific recommendations that will guide NIMH's efforts to develop its strategic plan on affective disorders.

In addition, NIMH staff came away from the meeting with an even greater appreciation of the public support for depression research, particularly for efforts designed to fight the stigma associated with depression and other mental illnesses and to reduce the barriers that prevent all who need treatment from getting it in a timely and effective manner. And though the institutional barriers are high, NIMH staff left the meeting with the public's backing, indeed a mandate, to engage in research that cuts across the portfolios of other institutes at the NIH in order to reduce the burdens of depression on the health and well-being of all Americans. As Dr. Hyman, NIMH's director, said at the end of the day, the forum was a success in that it provided critical input that would inform the Institute's efforts to develop effective therapies, preventive methods, and education outreach programs to mitigate the burdens of depression for all who suffer from its effects.