

National Alzheimer's Project Act (NAPA)

The information that follows was included as an attachment to an email submitted by the public.

For more information about NAPA, visit the NAPA website at:

<http://aspe.hhs.gov/national-alzheimers-project-act>

Title	Year	Citation	Summary	Electronic Access
AIDS/ADRD				
Psychiatric aspects of HIV-1 infection and AIDS	1990	Maj, M. et al. (1990). Psychiatric aspects of HIV-1 infection and AIDS. Psychological Medicine, 20:547-563. World Health Organization Division of Mental Health/Global Programme on AIDS, Geneva, Switzerland	The literature on the psychiatric aspects of HIV-1 infection is reviewed. The whole range of psychiatric disorders described in HIV-1 infected subjects, from HIV-1 dementia to adjustment disorders, is covered, along with the AIDS-related psychopathology, which may develop in subjects without HIV-1 infection.	http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=5008764
WHO Neuropsychiatric AIDS Study, Cross-sectional Phase I Study Design and Psychiatric Findings	1994	Maj, M., Janssen, R.; Starace, F.; Zaudig, M.; Satz, P.; Sughondhabirrom, B.; Luabeya, M.; Riedel, R.; Ndeti, D.; Calil, H.; Bing, E.; Louis St, M.; Sartorius, N. (1994). WHO Neuropsychiatric AIDS Study, Cross-sectional Phase I Study Design and Psychiatric Findings. Arch Gen Psychiatry, 51(1):39-49.	Most available studies on the psychiatric, neuropsychological, and neurological complications of HIV-1 infection and AIDS have been conducted in Western countries, on samples of well-educated, mostly white, homosexual men. Concerns about generalizability of the results of those investigations prompted the WHO to implement the cross-cultural venture called WHO Neuropsychiatric AIDS study. This project aims to assess the prevalence and natural history of HIV-1-associated psychiatric, neuropsychological, and neurological abnormalities in representative subject samples enrolled in the five geographic areas predominantly affected by the HIV-I epidemic. A data collection instrument including six modules makes assessment. The inter center and intra center reliability in the use of each module has been formally evaluated. The study consists of a cross-sectional phase and a longitudinal follow-up. The cross-sectional phase was completed in five centers. This paper reports on the results of psychiatric	http://www.ncbi.nlm.nih.gov/pubmed/8279928

			<p>assessment, which revealed a significantly higher prevalence of current mental disorders in symptomatic seropositive persons compared with seronegative controls among intravenous drug users in Bangkok and homosexuals/bisexuals in São Paulo. The mean global score on the Montgomery-Asberg Depression Rating Scale was significantly higher in symptomatic seropositive individuals than in matched seronegative controls in all centers. These results suggest that the significance of the psychopathological complications of symptomatic HIV-1 infection may have been underestimated by previous studies conducted on self-selected samples of well-educated, middle-class, mostly white, homosexual men.</p>	
<p>WHO Neuropsychiatric AIDS Study, Cross-sectional Phase II Neuropsychological and Neurological Findings.</p>	<p>1994</p>	<p>Maj, M., Janssen, R.; Starace, F.; Zaudig, M.; Satz, P.; Sughondhabirrom, B.; Luabeya, M.; Riedel, R.; Ndeti, D.; Calil, H.; Bing, E.; Louis St., M.; Sartorius, N. (1994). WHO Neuropsychiatric AIDS Study, Cross-sectional Phase II Neuropsychological and Neurological Findings. <i>Arch Gen Psychiatry</i>; 51(1):51-61.</p>	<p>The neuropsychological and neurological complications of HIV-1 infection and AIDS were explored within the cross-sectional phase of the WHO Neuropsychiatric AIDS Study. Special attention was devoted to the controversial issue of the prevalence and clinical significance of subtle cognitive deficits in asymptomatic seropositive subjects. A neuropsychological test battery validated for cross-cultural use, a structured interview for the diagnosis of dementia, a rating scale of functioning in daily living activities, and a neurological module were administered to representative samples of seropositive subjects and to matched seronegative controls living in the five geographic areas predominantly affected by the HIV-1 epidemic. Data are available for five centers. The prevalence of global</p>	<p>http://www.ncbi.nlm.nih.gov/pubmed/8279929</p>

			<p>neuropsychological impairment was significantly increased in asymptomatic seropositive subjects compared with controls in only two centers. A significant effect of education on neuropsychological performance was observed among asymptomatic seropositive individuals. In the two African centers, low-education, but not high-education, asymptomatic seropositive persons had an impaired performance. The frequency of impaired functioning in daily living activities and of neurologic abnormalities was higher in symptomatic, but not in asymptomatic, seropositive subjects compared with controls in all centers. These data suggest that the risk of subtle cognitive deficits may be increased in asymptomatic stages of HIV-1 infection. However, these deficits are not associated with neurologic changes and do not seem to affect subjects' social functioning.</p>	
Mental Health and HIV/AIDS: Psychiatric Care in Anti-retroviral Therapy	2005	Mental Health and HIV/AIDS: Psychiatric Care in Anti-retroviral Therapy (for second level care) (2005). World Health Organization: Geneva, Switzerland	Includes a section regarding the diagnosis of ADRD in persons with HIV/AIDS and the increased risks. They specifically identify care pathways for district-level hospitals, physicians for delirium, dementia and other psychiatric disorders.	http://whqlibdoc.who.int/publications/2005/9241593083_eng.pdf
Meetings & Media				
Dementia in later life: research and action	1983	Dementia in later life: research and action, report of a WHO Scientific Group on Senile Dementia [meeting held in Paris from 30 August to 5 September 1983] (1986). Technical	Report of WHO Scientific Group on Senile Dementia, from a meeting held in 1983. Reports the work of a scientific group convened to review biomedical and health service research on dementia disorders in old	

		Report Series 730. World Health Organization: Geneva, Switzerland.	people. Research strategies for improving knowledge of etiology, treatment, and prevention are stressed throughout. Specific problems include the need to establish core diagnostic criteria, the effective use of epidemiological investigations to increase scientific knowledge, the definition of appropriate support systems for coping with dementia, and strategies for promoting interdisciplinary and inter country collaborative research. The most extensive section covers the many lines of investigation focused on determining the causes of Alzheimer's disease, including present and recommended research in the fields of neuropathology, neurochemistry, neurophysiology, cell biology and molecular biology. Close to 200 references are included.	
Mental Health and Aging-a report on an informal consultation	1992	Mental Health and Aging-a report on an informal consultation (1992). Division of Mental Health, World Health Organization: Geneva, Switzerland.	This document presents the report on a meeting in Italy called to discuss the implications of both the aging of people with mental disorders and the deterioration of mental health with aging. It includes a series of background documents prepared for this meeting. Topics include current policies, measures of quality of care, cost-effectiveness, assessing impact of care giving and recommendations for the healthcare system	
Setting the WHO agenda for mental health	2000	Setting the WHO agenda for mental health (2000) Bulletin of the World Health Organization, 78(4): 500-.	Some prevention strategies are known to be effective in the areas of mental retardation, epilepsy, vascular dementia and behavioural problems; for the primary prevention of schizophrenia and some other major disorders more evidence is needed, and for some disorders, such as Alzheimer disease,	http://whqlibdoc.who.int/bulletin/2000/Number%204/78%284%29round.pdf

Fact Sheet: Mental and Neurological disorders	2001	World Health Report (2001). Fact Sheet: Mental and Neurological disorders. World Health Organization: Geneva, Switzerland.	<p>prevention is not yet possible though promising discoveries have been made.</p> <p>What is Alzheimer's disease? Alzheimer's disease is a degenerative brain syndrome characterized by a progressive decline in memory, thinking, comprehension, calculation, language, learning capacity and judgment. It is important, however, to differentiate the symptoms of Alzheimer's disease from normal age-related decline in cognitive functions which is much more gradual and leads to much milder disability. How many suffer? There are currently an estimated 37 million people worldwide with dementia, with Alzheimer's disease being responsible for causing the majority of the cases. About 5% of men and 6% of women over 60 years of age are affected with Alzheimer's disease. With the ageing of populations, this figure is projected to rapidly increase in the next 20 years. What can be done? There is currently no cure for Alzheimer's disease. The goals of care are to maintain the functioning of the individual, reduce disability due to lost mental functions, reorganize routines so as to maximize use of the retained functions, minimize symptoms such as suspiciousness, agitation and depression and to provide support to the family.</p> <p>Psychosocial interventions, including education, support, counseling and respite care, are extremely important in Alzheimer's disease, both for patients and family caregivers. Some medicines have demonstrated some usefulness in ameliorating cognitive dysfunction and improving attention, as well as</p>	<p>http://www.who.int/whr/2001/media_centre/en/whr01_fact_sheet1_en.pdf</p>
-----------------------------------------------	------	----------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Alzheimer's Disease: Of Emerging Importance</p>	<p>2002</p>	<p>Vas, Chicot J., Rajkumar, S., Tanyakitpibal, P., Chandra, V. (2002). Alzheimer's Disease: Of Emerging Importance. Regional Health Forum WHO South-East Asia Region, 6(1): 39-48.</p>	<p>reducing delusions.</p> <p>Alzheimer's disease is known to occur in all parts of the world where it has been systematically researched. It can affect anyone, regardless of caste, creed, race, socioeconomic group or gender. As far as is known, it can affect anyone; even Mr Ronald Reagan, the former President of USA has Alzheimer's disease. But nobody can be sure beforehand who will be affected. Unfortunately, myths and misconceptions about the disease are better known than facts. This often deprives patients of proper medical treatment, much to the detriment of both the patient and the family.</p>	<p>http://www.searo.who.int/en/Section1243/Section1310/Section1343/Section1344/Section1355_5309.htm</p>
<p>Current Topics</p>	<p>2005</p>	<p>Current Topics (2005). WHO Drug Information 19(1):24. The World Health Organization.</p>	<p>The National Institutes of Health (NIH) has announced that investigators have suspended the use of two drugs, naproxen (220 mg twice a day) and celecoxib (200 mg twice a day), in a large, three-arm, national Alzheimer disease prevention trial sponsored by the National Institute on Aging (NIA), a part of the NIH. The trial, called the Alzheimer Disease Anti-Inflammatory Prevention Trial (or ADAPT) was designed to assess the potential benefit of long-term use of nonsteroidal anti-inflammatory drugs (NSAIDs) — naproxen (Aleve®) and the COX-2 inhibitor celecoxib (Celebrex®) in decreasing the risk of developing Alzheimer disease in people 70 years of age or older who were considered to be at increased risk because of family history, but did not have symptoms of the disease. Approximately 2400 volunteer participants were randomly assigned to receive naproxen, celecoxib, or placebo for periods of time up to three years. Although no</p>	<p>http://whqlibdoc.who.int/druginfo/19_1_2005.pdf</p>

			<p>significant increase in risk for celecoxib was found in this trial, the use of these drugs in the study was suspended in part because of findings reported last week from a National Cancer Institute (NCI) trial to test the effectiveness of celecoxib in preventing colon cancer. In addition, however, data from the ADAPT trial indicated an apparent increase in cardiovascular and cerebrovascular events among the participants taking naproxen when compared with those on placebo. The ADAPT trial began in 2001 and was conducted at six sites across the USA. Investigators and NIH scientists will continue to review this and other studies. The cancer prevention trials and the ADAPT study are among the first long-term, clinical trials to test these classes of drugs. These studies are examining these compounds for uses very different from the uses for which these medications are currently approved.</p>	
<p>WHO Calls for political commitment to tackle the growing mental health burden</p>	<p>2011</p>	<p>WHO Calls for political commitment to tackle the growing mental health burden (2011). World Health Organization-Western Pacific Region.</p>	<p>An estimated 100 million people in the Western Pacific Region suffer from mental and neurological disorders. Surveys estimate that at least 2% of the population suffer from the most severe forms of mental disorder, including schizophrenia, dementia, severe mental retardation and the consequence of brain injuries. Less severe but still disabling conditions—depressive disorders, anxiety and obsessive-compulsive disorders—affect a further 3% to 4% of the population. In addition, the number of cases of dementia is expected to increase substantially with a growing ageing population, particularly in the Western Pacific Region. Global statistics indicate that in 2010, 36 million people lived with dementia. This</p>	<p>http://www.wpro.who.int/rcm/en/rc62/press_releases/pr_20111013_MNH.htm</p>

			number is expected to rise to 66 million by 2030. Two thirds of the increase will occur in low- and middle-income countries. With substantial cost to health and social systems and to families, the Regional Committee called on WHO to support Member States in developing plans for dealing with the emerging need for long-term care and focus on supporting family caregivers through networks of caregiver nongovernmental organizations.	
Basic Research				
The ICD-10 Classification of Mental and Behavioural Disorders	1993	The ICD-10 Classification of Mental and Behavioural Disorders-Diagnostic Criteria (1993). World Health Organization.	Includes diagnostic criteria for Alzheimer's Disease, vascular dementia, dementia in other disease classes, and unspecified dementia.	
Epidemiology of Mental Disorders and Psychosocial Problems. Dementia	1994	Henderson, A.S. (1994). Epidemiology of Mental Disorders and Psychosocial Problems. Dementia. The World Health Organization: Geneva, Switzerland	A state-of-the-art review of current knowledge on the epidemiology of dementia. Findings from recent studies are critically assessed with the aim of determining the magnitude of the current and future public health problem posed by dementia, identifying risk factors, and guiding the development of appropriate interventions. In view of demographic trends towards an increasingly aged population, the book predicts that the future will see a marked expansion in the number of persons suffering from dementia, with profound social and economic consequences. The book opens with a review of methodological and conceptual issues surrounding the diagnosis of dementia of Alzheimer type, vascular dementia, Lewy body disease, Pick disease, Creutzfeldt-Jakob disease, Huntington disease, Parkinson disease, and progressive dementia caused by AIDS.	http://apps.who.int/bookorders/WHP/detart1.jsp?sesslan=1&codlan=1&codcol=15&codcch=2407

			<p>Various diagnostic methods, screening instruments, and simplified assessment questionnaires, used in epidemiological studies, are also briefly discussed. The most extensive chapter reviews and interprets the results of incidence and prevalence studies conducted in different populations. Studies of a range of possible risk factors for vascular dementia and Alzheimer disease are evaluated in the next chapter. For Alzheimer disease, possible risks considered range from genetic factors, through exposure to aluminium, to the use of alcohol, tobacco, and analgesics. The book concludes with a series of conclusions and recommendations for future research. Annexed to the book are the ICD-10 clinical descriptions and diagnostic guidelines, and the ICD-10 diagnostic criteria for research, for this group of disorders.</p>	
The World Health Report	1995	The World Health Report (1995). The World Health Organization: Geneva, Switzerland.	<p>Two of the most pressing problems in the future will be the provision of care for people with dementia and those needing joint replacements for arthritic diseases. WHO estimates that there are 165 million people in the world with rheumatoid arthritis. The long-term care of the frail elderly is becoming one of the most debated medical and political issues in many developed countries, and the developing world too will soon have to wrestle with it. If people are not to be left destitute and uncared for at the end of their lives, more attention must be given to social mechanisms for the support of the elderly and the means to fund them.</p>	http://www.who.int/whr/1995/media_centre/executive_summary1/en/index4.html#
Psychiatry of the	1996	Psychiatry of the Elderly: A consensus	Psychiatry of the elderly is a branch of	http://www.who.int/mental

Elderly: A consensus document

document (1996). Division of Mental Health and Substance Abuse, The World Health Organization: Geneva, Switzerland.

psychiatry and forms part of the multidisciplinary delivery of mental health care to older people. The specialty is sometimes referred to as geriatric psychiatry, old age psychiatry or psychogeriatrics. Its area of concern is the psychiatry of people of 'retirement' age and beyond. Many services have an age cut-off at 65 but countries and local practices may vary: several specialist services include provision for younger people with dementia. The specialty is characterised by its community orientation and multidisciplinary approach to assessment, diagnosis and treatment. An elderly patient suffering from mental health problems often has a combination of psychological, physical and social needs. This implies that individual assessment management and follow-up requires collaboration between health, social and voluntary organizations and family carers. Mental health problems in old age are common and an understanding of the principles involved in their identification and management should be an integral part of the general training of all health and social care workers. Progress in the field must be evidence- based and founded on rigorous empirical research with which practitioners should aim to keep up to date. Past experience and behaviour may influence whether a person develops mental illness and how such illness presents itself. Multiple losses (death of relatives/friends, declining health, loss of status etc) in old age may be particularly important though many older people remain resilient despite multiple adversity. The

health/media/en/17.pdf

			specialty deals with the full range of mental illnesses and their consequences, particularly mood and anxiety disorders, the dementias, the psychoses of old age and substance abuse. In addition, the specialty has to deal with older people who developed chronic mental illness at a younger age. At any rate, psychiatric morbidity in old age frequently coexists with physical illness and is likely to be complicated by social problems. Older people may also have more than one psychiatric diagnosis.	
The World Health Organization's Global Initiative on Neurology and Public Health	1997	Janca, A.; Prilipko, L; and Costa E. Silva, J. (1997). The World Health Organization's Global Initiative on Neurology and Public Health. <u>J Neurol Sci</u> . 1997 Jan;145(1):1-2. Division of Mental Health and Prevention of Substance Abuse, World Health Organization, Geneva, Switzerland.	In 1993, the World Health Organization launched a global initiative aimed at increasing public and professional awareness of the public health aspects of neurological disorders. The initial phase of this project has been carried out through the organization of a series of symposia on prevalence, severity and costs of neurological disorders including dementia, stroke, epilepsy and headache. The main objective of the next phase of the project is to develop an international educational programme on neurology and public health and to establish a network of training centres in different regions of the world.	http://www.who.int/mental_health/neurology/neurological_disorders_report_web.pdf
The World Health Report	1997	The World Health Report (1997). The World Health Organization: Geneva, Switzerland.	The impact of mental and neurological disorders on society is likely to become more and more profound in future years. Already, many hundreds of millions of people are affected by some form of mental disorder, from the relatively minor to the incurable and life-threatening; many individuals suffer from several simultaneously. Some 29 million suffer from dementia, of which Alzheimer disease is the most common form. Global population	http://www.who.int/whr/1997/media_centre/executive_summary1/en/index14.html

			<p>ageing will inevitably result in huge increases in the number of cases of dementia. The risk of developing the condition rises steeply with age in people over 60; the possibilities for prevention and treatment are limited. Projections suggest that Africa, Asia and Latin America together could have more than 80 million people with dementia by the year 2025.</p>	
World Health Report	1998	World Health Report (1998). Health Agenda for the 21 st Century.	<p>With a better understanding of ageing and diseases processes, distinctions have become artificial between infectious and non-infectious diseases, as well as between physical and mental ill-health. Recent studies indicate for example that interruption of the blood supply to the brain has important mental and physical health consequences, producing stroke, vascular dementia and transient ischaemic attacks (mini-strokes). Every year, millions of people survive a stroke and suffer brain damage with varying degrees of continuing mental and physical disability. Vascular dementia has a more gradual onset than stroke and is less likely to be reported as a cause of death, but it is another important cause of disability. Transient ischaemic attacks affecting the brain are important warning signs of future stroke or dementia and call for prompt preventive measures. Although most strokes and dementia occur in the elderly, they are nevertheless a significant cause of morbidity in younger populations (one-third of strokes occur in people aged under 65). Both stroke and dementia contribute significantly to the global burden of disease, and are expensive to treat. To the cost to health services should be added</p>	<p>http://www.who.int/whr/1998/en/whr98_ch8.pdf</p>

			<p>the financial and emotional cost to the families who provide most of the caring for those affected. Includes a special section on the brain, neurology and psychiatry.</p>	
<p>Guidelines for drinking-water quality</p>	<p>1998</p>	<p>Guidelines for drinking-water quality, 2nd ed. (1998). Addendum to Vol. 2. Health criteria and other supporting information World Health Organization, Geneva.</p>	<p>It has been hypothesized that aluminum exposure is a risk factor for the development or acceleration of onset of Alzheimer disease (AD) in humans. WHO (1997) has evaluated some 20 epidemiological studies that have been carried out to test the hypothesis that aluminum in drinking-water is a risk factor for AD. Study designs ranged from ecological to case-control. Six studies on populations in Norway (Flaten, 1990), Canada (Neri & Hewitt, 1991), France (Michel et al., 1991; Jacqmin et al., 1994), Switzerland (Wettstein et al., 1991), and England (Martyn et al., 1989) were considered of sufficiently high quality to meet the general criteria for exposure and outcome assessment and the adjustment for at least some confounding variables. Of the six studies that examined the relationship between aluminum in drinking-water and dementia or AD, three found a positive relationship, but three did not. However, each of the studies had some deficiencies in the study design (e.g. ecological exposure assessment; failure to consider aluminum exposure from all sources and to control for important confounders, such as education, socioeconomic status, and family history; the use of surrogate outcome measures for AD; and selection bias). In general, the relative risks determined were less than 2, with large confidence intervals, when the total aluminum concentration in drinking-water was 0.1 mg/litre or higher. Based on</p>	<p>http://www.who.int/water_sanitation_health/dwq/chemicals/en/aluminium.pdf</p>

			<p>current knowledge of the pathogenesis of AD and the totality of evidence from these epidemiological studies, it was concluded that the present epidemiological evidence does not support a causal association between AD and aluminum in drinking-water (WHO, 1997). In addition to the epidemiological studies that examined the relationship between AD and aluminum in drinking-water, two studies examined cognitive dysfunction in elderly populations in relation to the levels of aluminum in drinking-water. The results were again conflicting. One study of 800 male octogenarians consuming drinking-water with aluminum concentrations up to 98 µg/litre found no relationship (Wettstein et al., 1991). The second study used “any evidence of mental impairment” as an outcome measure and found a relative risk of 1.72 at aluminum drinking-water concentrations above 85 µg/litre in 250 males (Forbes et al., 1994). Such data are insufficient to show that aluminum is a cause of cognitive impairment in the elderly.</p>	
<p>An overview of a strategy to improve the mental health of underserved populations</p>	<p>1999</p>	<p>An overview of a strategy to improve the mental health of underserved populations (1977, revised 1999). World Health Organization: Geneva, Switzerland.</p>	<p>Mental and neurological problems are amongst the most important contributors to the global burden of disease¹ and disability². While public health intervention has led to dramatic improvements in physical health, in particular, mortality rates, the mental component of health has not improved and in many communities has deteriorated significantly. All indications are that this burden will increase in the coming decades and will pose serious social and economic handicaps in global development issues, unless substantive action is taken. The leading challenge now is to reduce the burden</p>	<p>http://www.psychosocial.com/policy/nambroch.pdf</p>

			<p>through systematic and comprehensive action to prevent mental illness where this is possible, to treat those conditions for which effective treatments exist, to rehabilitate those suffering from chronic mental illness and to care for those people, in particular those suffering from dementia, whose condition will progressively deteriorate. All of this needs to be achieved in a humane but cost-effective way. <i>Nations for Mental Health</i> has been created to address this challenge through assistance directed to country needs. It is an initiative of the World Health Organization which has been developed in collaboration with the Department of Social Medicine of the Harvard Medical School. A public health model drives the initiative which works towards two main objectives; strengthening mental health policies, legislation and plans; and planning and developing services. <i>Nations for Mental Health</i> targets common and disabling mental and neurological problems and focuses on underserved populations.</p>	
<p>The genetics of mental illness: implications for practice</p>	<p>2000</p>	<p>Hyman, Steven (2000). The genetics of mental illness: implications for practice. <i>Bulletin of the World Health Organization</i>, 78(4).</p>	<p>Discussion of the implications of genetic studies of mental illness. here are rare Mendelian disorders with mental symptoms, e.g. Rett syndrome, in which symptoms resembling those of autism coexist with mental retardation (18), and there are rare Mendelian forms of early-onset familial Alzheimer disease (19). The identification of such Mendelian forms, even though they may be responsible for only a small percentage of cases within a population, e.g. of Alzheimer disease, is potentially very important as a research tool. No rare Mendelian forms of the common</p>	<p>http://www.who.int/bulletin/archives/78%284%29455.pdf</p>

mental disorders have yet been detected. Thus the goal for the development of treatment is to move from drug targets derived from the action of existing treatments to targets related to pathophysiological processes. This is perhaps the greatest promise of genetics and neuroscience. Consider, for example, genetic discoveries that may lead to new treatments for Alzheimer disease. Success is not certain but there are some very promising leads that illustrate the power of neuroscience and genetics to identify drug targets involved in the fundamental disease process. The result could be treatments that would slow or halt progression of the disease. Much research in biochemistry, genetics and neurobiology has suggested that a small fragment of the b-amyloid precursor protein (a specific form of the so-called Ab fragment) may be one of the causes of cell death in Alzheimer disease. A large amount of biochemical research led to the identification of this fragment but the major breakthroughs came from genetics. The common varieties of Alzheimer disease appear to be genetically complex, i.e. resulting from multiple genes (including the ApoE locus) and nongenetic factors. However, a small percentage of familial Alzheimer disease of early onset results from Mendelian transmission, i.e. in these cases the dominant inheritance of a single locus is sufficient to produce illness. Genetic linkage studies in early onset families identified multiple mutations in three different genes: the b-amyloid precursor itself and genes encoding the previously unknown proteins presenilin 1

<p>Health Ageing: Adults with Intellectual Disabilities Physical Health Issues</p>	<p>2000</p>	<p>Evenhuis, H.; Henderson, C.M.; Beange, H.; Lennox, N.; Chicoine, B. (2000). Health Ageing: Adults with Intellectual Disabilities Physical Health Issues. Department of Mental Health and Substance Dependence, The World Health Organization: Geneva, Switzerland</p>	<p>and presenilin 2.</p> <p>The majority of people, including people with intellectual disability, live in the world's less developed countries. Because of the paucity of information regarding the health status and needs of persons with intellectual disabilities in less developed countries, it is hard to make universal statements regarding ^healthy ageing] for people with an intellectual disability. The highest priorities for the majority of people with intellectual disabilities in all countries are likely to include basic health care, adequate nutrition and housing, education, civil rights, and political, social and economic stability. The ageing and onset of dementia amid this population is discussed. An international perspective on healthy ageing for persons with intellectual disabilities must acknowledge that the available literature largely reflects the experiences of clinicians and researchers in industrialized countries. Nelson and Crocker in 1978 called for affiliations between academic developmental physicians and physicians serving persons with intellectual disabilities in large institutions. A current high priority should be the development of alliances between policy makers, advocacy groups, physicians, educators and other professionals serving people with intellectual disabilities in less developed and industrialized countries</p>	<p>http://www.who.int/mental_health/media/en/21.pdf</p>
-------------------------------------------------------------------------------------------	-------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------

<p>Healthy Ageing-Adults with Intellectual Disabilities Biobehavioural Issues</p>	<p>2000</p>	<p>Thorpe, I.; Davidson, P.; Janicki, M. (2000). Healthy Ageing-Adults with Intellectual Disabilities Biobehavioural Issues. Department of Mental Health and Substance Dependence. The World Health Organization: Geneva, Switzerland</p>	<p>In nations with established market economies, most adults with intellectual disabilities who live past their third decade are likely to survive into old age, and experience the normal ageing process. As in the general elderly population, in spite of gradual declines in a variety of domains, they can still have active and varied lifestyles with an excellent quality of life. Age associated, functional declines must be separated from specific losses due to physical illness, dementia, depression, sensory loss, and social and environmental factors. The interaction between biological, psychological and social aspects of ageing remains the most important factor in the functional outcome of a person with intellectual disabilities.</p>	<p>http://www.who.int/mental_health/media/en/24.pdf</p>
<p>Mental Health Policy developments in Latin America.</p>	<p>2000</p>	<p>Alarcon, R.D., Aguilar-Gaxiola, S.A. (2000). Mental Health Policy developments in Latin America. The Bulletin of the World Health Organization, 78(4) : 483-490.</p>	<p>New assessment guidelines for measuring the overall impact of mental health problems in Latin America have served as a catalyst for countries to review their mental health policies. Latin American countries have taken various steps to address long-standing problems such as structural difficulties, scarce financial and human resources, and social, political, and cultural obstacles in the implementation of mental health policies and legislation. These policy developments, however, have had uneven results. Policies must reflect the desire, determination, and commitment of policy-makers to take mental health seriously and look after people's mental health needs. This paper describes the development of mental health policies in Latin American countries, focusing on published data in peer-reviewed journals, and legislative change and its implementation. It presents a</p>	<p>http://www.who.int/bulletin/archives/78(4)483.pdf</p>

			brief history of mental health policy developments, and analyzes the basis and practicalities of current practice. It is noted that ADRD was established as a priority in more than one Latin American country.	
Global Burden of dementia in the year 2000: summary of methods and data sources	2000	Mathers, Colin and Matilde Leonardi (2000). Global Burden of dementia in the year 2000: summary of methods and data sources. Global Burden of Disease, World Health Organization.	Accounting for 2.6% of total YLD, around the same percentage as congenital malformations (1) In the Version 2 estimates for the Global Burden of Disease 2000 study, published in the World Health Report 2002 (2), dementia is the 11th leading cause of YLDs at global level, accounting for 2.0% of total global YLDs. Dementia is difficult to define and detect in the population. Even with the difficulties of determining prevalence and incidence, it is clear that dementia causes a substantial burden globally. This draft paper summarises the data and methods used to produce the Version 2 estimates of dementia burden for the year 2000	http://www.who.int/healthinfo/statistics/bod_dementia.pdf
Mental Health in the 21 st Century.	2000	Brundtland, Gro Harlem (2000). Mental Health in the 21 st Century. Bulletin of the World Health Organization 78(4):411-.	After major depression, the most important causes of neuropsychiatric burden are alcohol dependence, bipolar affective disorders and schizophrenia. In high-income countries, dementias are the third leading cause of neuropsychiatric burden. Five of the 10 leading causes of disability worldwide (major depression, schizophrenia, bipolar disorders, alcohol use and obsessive compulsive disorders) are mental problems. They are as relevant in poor countries as they are in rich ones, and all predictions are that there will be a dramatic increase in mental problems in the coming years. While there is no cure for dementia , there are inexpensive and culture-	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2560741/pdf/10885158.pdf

			sensitive interventions that can help families and communities to provide better care for those affected with this disorder.	
Alzheimer's Disease: The Brain Killer	2001	Vas, Chicot J., Rajkumar, S., Tanyakitpaisal, P., Chandra, V. (2001). Alzheimer's Disease: The Brain Killer. The World Health Organization-South-East Asia Regional Office.	Alzheimer's disease (AD) is a degenerative brain syndrome characterized by a progressive decline in memory, thinking, comprehension, calculation, language, learning capacity and judgment sufficient to impair personal activities of daily living. The rate of occurrence of AD doubles every five years for those between the 65 and 85 years of age, but if onset were delayed by five years, the number of cases worldwide would be halved. Thus serious attention needs to be paid to the risk factors and preventive measures that may be taken to postpone the onset, if not prevent the appearance of AD. Epidemiological data already suggest that certain communities in Asia and Africa might have a lower risk of AD compared to western countries. Researchers in India have suggested a gene-environment interaction in the causation of AD. Although genes cannot be altered, the environmental risk factors which interact with the genetic risk factors can possibly be modified, thereby reducing the risk. This promising concept must be pursued as it affords a ray of hope to the future. With the increase in life expectancy, populations of Member Countries in the South East Asia Region (SEAR) will be increasingly faced with diseases which affect the older age group, such as AD. Thus it is time for governments to plan and address issues	http://www.searo.who.int/LinkFiles/Health_and_Behaviour_alzheimers.pdf

			<p>related to such diseases before they reach a crisis situation. The WHO Regional Office for South-East Asia is committed to assist Member Countries in addressing the challenges of tackling these diseases. This manual “Alzheimer’s Disease: The Brain Killer” has been prepared by experts from the Region, provides valuable information for the lay public and policy-makers regarding the multi-faceted aspects of ‘the brain killer disease’ and what can be done to relieve the suffering of patients and their caregivers.</p>	
<p>Reducing Stigma and Discrimination Against Older People With Mental Disorders</p>	<p>2002</p>	<p>Reducing Stigma and Discrimination Against Older People With Mental Disorders-A technical Consensus Document (2002). World Health Organization: Geneva, Switzerland</p>	<p>Dementia is often seen as a natural part of ageing, and is therefore not recognised or managed appropriately. However, it is still the case that specific symptoms of dementia are powerfully stigmatising (e.g. disturbed behaviour, poor self care, incontinence), both in the community and in care settings. In some cultures, these symptoms may be regarded as evidence of neglect or failure of care by family carers, who are blamed accordingly. Popular (and some professional) use of the term ‘dementia’ is still stigmatising. The sufferer’s loss of memory often leads to loss of their past, and their perceived conversion from a person into an object. As a result, important cultural and religious beliefs and personal preferences may be ignored. Older people with dementia are often perceived as having no quality of life or capacity for pleasure. In both developed and developing societies, a dementia diagnosis may be used to exclude individuals from some forms of care, e.g. emergency resuscitation, in-patient units, nursing homes. However, in some cultures, the fact that dementia has an organic</p>	<p>http://www.who.int/mentalhealth/media/en/499.pdf</p>

			<p>aetiology may reduce stigma associated with it, i.e. public awareness of this means that those affected are not regarded as 'mentally ill'. This reflects ambiguity in how it is classified, and has implications for service organisation and reimbursement.</p>	
<p>Cross-national comparability of burden of disease estimates: the European Disability Weights Project</p>	<p>2002</p>	<p>Essink-Bot, M.L., Pereira, J., Packer, C., Schwarzingler, M., Burstrom, K., and the European Disability Weights Group (2002). Cross-national comparability of burden of disease estimates: the European Disability Weights Project. Bulletin of the World Health Organization, 80(8): 644-652.</p>	<p>To investigate the sources of cross-national variation in disability-adjusted life-years (DALYs) in the European Disability Weights Project. Methods Disability weights for 15 disease stages were derived empirically in five countries by means of a standardized procedure and the cross-national differences in visual analogue scale (VAS) scores were analysed. For each country the burden of dementia in women, used as an illustrative example, was estimated in DALYs. An analysis was performed of the relative effects of cross-national variations in demography, epidemiology and disability weights on DALY estimates. Findings Cross-national comparison of VAS scores showed almost identical ranking orders. After standardization for population size and age structure of the populations, the DALY rates per 100 000 women ranged from 1050 in France to 1404 in the Netherlands. Because of uncertainties in the epidemiological data, the extent to which these differences reflected true variation between countries was difficult to estimate. The use of European rather than country-specific disability weights did not lead to a significant change in the burden of disease estimates for dementia. Conclusions Sound epidemiological data are the first requirement for burden of disease estimation and relevant between-countries</p>	<p>http://www.who.int/bulletin/archives/80%288%29644.pdf</p>

			comparisons. DALY estimates for dementia were relatively insensitive to differences in disability weights between European countries.	
Regulatory and Safety Action	2003	Regulatory and Safety Action (2003) . WHO Drug Information, 14(4): 251 . The World Health Organization	The Food and Drug Administration (FDA) has approved memantine (Namenda®), for the treatment of moderate to severe Alzheimer disease. Alzheimer disease is a degenerative condition affecting memory, judgment and the ability to reason. The new drug — an N-methyl-D-aspartate (NMDA) antagonist — is thought to work by blocking the action of the chemical glutamate. Although memantine helps treat the symptoms of Alzheimer disease in some patients, there is no evidence that it modifies the underlying pathology of the disease. The first two double-blind studies, each of about six months duration, were conducted in the United States. The larger study of 400 patients was carried out in subjects already taking donepezil, a drug already approved for the treatment of Alzheimer disease. Both studies showed that patients on memantine experienced less deterioration in their symptoms compared to patients treated with placebo during the study. The third Regulatory and Safety Action study, conducted in nursing homes in Latvia, was a 12-week double-blind study in 166 patients with severe Alzheimer disease and also showed a statistically significant advantage of memantine over placebo.	http://whqlibdoc.who.int/druginfo/17_4_2003.pdf

Gender, Health and Ageing	2003	Gender, Health and Ageing (2003). Department of Gender and Women's Health, The World Health Organization: Geneva, Switzerland.	Incidence rates for dementia do not appear to differ between men and women. Since, however, women on average live longer than men, there are more older women than older men living with dementia-impaired function.	http://whqlibdoc.who.int/gender/2003/a85586.pdf
Alzheimer Disease: Opportunities for Pharmaceutical Gaps	2004	Tanna, Saloni (2004). Alzheimer Disease: Opportunities for Pharmaceutical Gaps. World Health Organization: Geneva, Switzerland.	At present, there is no cure for AD, or any pharmacologic therapy that can delay its onset or affect the pathophysiology of the illness. The primary goals of treatment are to maximize the patient's ability to function in daily life, maintain quality of life, slow the progression of symptoms, and treat depression or disruptive behaviors. The current pharmacologic therapy for AD only provides symptomatic relief for a short period of time, six to eighteen months. The only drugs approved in the US and several parts of Europe for treating AD are cholinesterase inhibitors and the NMDA antagonist, memantine. These drugs do not affect the pathology or progress of AD. Management of AD is complex and clinicians and caregivers are confronted with numerous challenges in managing the AD. Some of these include employing unique social and environmental interventions; knowledge and use of increasingly sophisticated medications, and providing individualized therapy to patients, working with care takers or varying systems providing care.	archives.who.int/prioritymeds/report/background/ alzheimer.doc
Immunization Against Alzheimer's Disease and Other Neurodegenerative Disorders	2004	Selkoe, D.J., and Christen, Y. (2004). Immunization Against Alzheimer's Disease and Other Neurodegenerative Disorders. The World Health Organization: Geneva, Switzerland.	The promising effects of beta-amyloid immunization in mice, reported in a recent study, stimulated substantial research and raised high hopes in the field. In retrospect, this study seems both logical, being consistent with	http://www.who.int/genomics/publications/alzheimers/en/

			that amyloid theory central to the study of Alzheimer's disease today, and paradoxical, because it used the toxic substance itself for a treatment benefit. The ensuing research opened up multiple perspectives for experimentation and treatment but clinical trials that were subsequently started had to be discontinued in January 2002 due to the serious side effects of the therapy. The aim of this book is not to arouse false hopes for a therapeutic project that remains to be proven, but to discuss the available information and the questions raised.	
The Living Brain and Alzheimer's Disease	2004	Hyman, B.T., Demonet, J.F., Christen, Y. (2004). The Living Brain and Alzheimer's Disease. The World Health Organization: Geneva, Switzerland.	From large cross-sectional studies of autopsy material, it seems as if a time course of Alzheimer's Disease, at least on average, can be mapped out: a pattern of hierarchical vulnerability for neuronal loss and neurofibrillary tangles beginning in medial temporal lobe structures proceeding through association areas. Plaques follow their own temporal course, with widespread cortical deposits occurring even early in a disease process. The whole process may well take twenty years, the first half of which may be without overt symptoms.	http://www.who.int/genomics/publications/livingbrain/en/
Disease Control Priorities Related to Mental, Neurological, Developmental, and Substance Abuse Disorders	2006	Disease Control Priorities Related to Mental, Neurological, Developmental, and Substance Abuse Disorders (2006). World Health Organization: Geneva, Switzerland.	This publication brings together five chapters from Disease Control Priorities in Developing Countries, 2nd edition (2006), along with an introduction and a conclusion by WHO. The chapters cover mental disorders, neurological disorders, learning and developmental disabilities, and alcohol and illicit opiate abuse. The purpose of this special package is to provide information on cost-effectiveness of	http://whqlibdoc.who.int/publications/2006/924156332X_eng.pdf

			<p>interventions for these specific groups of disorders. This information should contribute to reformulation of policies and programmes and reallocation of resources, eventually leading to reduction of morbidity and mortality. The disorders and conditions covered in the five chapters of this volume are all characterized by low current levels of use of effective interventions. This underlines the need for substantial enhancement in resources, but also presents an opportunity in that the cost-effectiveness data can be used to focus enhanced resources to those interventions that are shown to give the best value for money. As mental, neurological, developmental and substance use disorders move up in the public health agenda of developing countries, the evidence presented in this publication can assist in resource allocation.</p>	
<p>Neurological Disorders: public health challenges</p>	<p>2006</p>	<p>Neurological Disorders: public health challenges (2006). World Health Organization: Geneva, Switzerland.</p>	<p>The Global Burden of Disease (GBD) study, a collaborative endeavour of the World Health Organization (WHO), the World Bank and the Harvard School of Public Health, drew the attention of the international health community to the burden of neurological disorders and many other chronic conditions. This study found that the burden of neurological disorders was seriously underestimated by traditional epidemiological and health statistical methods that take into account only mortality rates but not disability rates. The GBD study showed that over the years the global health impact of neurological disorders had been underestimated. With awareness of the massive burden associated with neurological disorders came the</p>	<p>http://www.who.int/mentalhealth/neurology/neurological_disorders_report_web.pdf</p>

recognition that neurological services and resources were disproportionately scarce, especially in low income and developing countries. Furthermore, a large body of evidence shows that policy-makers and health-care providers may be unprepared to cope with the predicted rise in the prevalence of neurological and other chronic disorders and the disability resulting from the extension of life expectancy and ageing of populations globally. In response to the challenge posed by neurological disorders, WHO launched a number of global public health projects, including the Global Initiative on Neurology and Public Health whose purpose is to increase professional and public awareness of the frequency, severity and costs of neurological disorders and to emphasize the need to provide neurological care at all levels including primary health care. This global initiative has revealed a paucity of information on the burden of neurological disorders and a lack of policies, programmes and resources for their management. In response to these findings, WHO and the World Federation of Neurology (WFN) recently collaborated in an international Survey of Country Resources for Neurological Disorders involving 109 countries and covering over 90% of the world's population. The survey collected information from experts on several aspects of the provision of neurological care around the world, ranging from frequency of neurological disorders to the availability of neurological services across countries and settings. The findings show that resources are clearly

			<p>inadequate for patients with neurological disorders in most parts of the world; they highlight inequalities in the access to neurological care across different populations, especially in those living in low income countries and in the developing regions of the world. The results of the survey, which include numerous tables, graphs and commentaries, have been published in the WHO/WFN Atlas of Country Resources for Neurological Disorders. This report takes the collaboration with nongovernmental organizations and the Atlas Project one step further. It aims to inform governments, public health institutions, nongovernmental organizations and others so as to help formulate public health policies directed at neurological disorders and to guide informed advocacy</p>	
<p>International Harmonization</p>	<p>2008</p>	<p>International Harmonization (2008). WHO Drug Information 22(3): 205. The World Health Organization</p>	<p>Development of medicines for Alzheimer and Parkinson disease European Union — The European Medicines Agency (EMA) has released two guidelines for companies developing medicines for the treatment of Alzheimer disease and other dementias and for Parkinson disease, in light of recent scientific progress in the understanding of these diseases and conditions. Advances in clinical science, physiopathology and molecular biology have stimulated new interest in the development of more effective symptomatic or disease-modifying treatments, i.e. early treatments that may prevent the emergence or slow down the progression of disease. The guidelines were developed in response to the need of companies developing these new types of medicines for guidance on appropriate clinical</p>	<p>http://whqlibdoc.who.int/druginfo/22_3_2008.pdf</p>

			<p>trial designs. As life expectancy increases, neurodegenerative diseases and dementia will affect more and more people over the coming decades, and these guidelines are expected to help improve the availability of medicines to treat such diseases and conditions. The guidelines will come into effect on 1 February 2009.</p>	
<p>Looming Dementia epidemic in Asia</p>	<p>2011</p>	<p>Looming Dementia epidemic in Asia (2011). Bulletin of the World Health Organization, 89(3):166-167.</p>	<p>There is a great challenge to get dementia on the health policy agenda, but much has been achieved in the past decade,” says Dr Huali Wang, vice chair and vice secretary-general of Alzheimer’s Disease Chinese (ADC). This research and advocacy organization is working to get dementia higher up on the health policy agenda. Alzheimer disease is the most common cause of dementia, but it is often used as an umbrella term for several conditions causing dementia. “Dementia care was listed as one of the priorities of mental health services in the Mental Health Plan 2002–2010 and ADC is currently working with the medical community to get it included in the upcoming Major Mental Health Plan,” explains Wang. “The government has realized the burden of dementia ... but we need to take action to get a general estimate and we also need more investment in educating the media and government,” she says. China’s experience with this pressing public health issue is just one of several in Asia. Of the 35 million people currently living with dementia globally, 58% live in low- and middle-income countries and by 2050 this figure is projected to reach 71% of the total. Eastern Asia and southern Asia will see dementia growth rates more than double in the</p>	<p>http://www.who.int/bulletin/volumes/89/3/11-020311/en/index.html</p>

			coming 20 years, Latin America will see increases of 134% to 146% and North Africa and the Middle East can expect a 125% rise, according to research by Alzheimer Disease International (ADI). High-income countries already have a sense of the cost of dementia.	
Direct Care				
Help for Caregivers	1994	Help for Caregivers (1994). Alzheimer's Disease International and World Health Organization.	This booklet aims to help those faced with caring for a person with dementia. It offers information to carers to help them in their challenging task. Carers who are well informed can help make life better for both themselves and the person with dementia. This booklet uses the word carer throughout. A carer can refer to a spouse, family member or health professional caring for a person with dementia. It includes basic information about AD, practical tips on managing dementia, the personal and emotional stress of caring, caring for yourself etc.	http://www.alz.co.uk/ADI-publications
Organization of Care in Psychiatry of the Elderly	1997	Organization of Care in Psychiatry of the Elderly-A technical Consensus Statement (1997). Division of Mental Health and Prevention of Substance Abuse, The World Health Organization: Geneva, Switzerland	The objectives of this document are to: promote debate at the local level on the mental health needs of older people and their care givers; describe the basic components of care to older people with mental disorders, and their coordination; stimulate assist and review the development of policies, programmes and services in psychiatry of the elderly according to the framework of the WHO Primary Health Care Strategy ² ; and encourage the continuous evaluation of all policies, programmes and services to older people with mental disorders. This document is intended for use by all those involved in the development and	http://www.who.int/mental_health/media/en/19.pdf

			implementation of policies, programmes and services for promoting the mental health of older people. It is therefore expected that this document will be widely distributed.	
Diagnosis of Alzheimer's Disease	1997	Reisberg, B., & Burns, A. (1997). Diagnosis of alzheimer's disease. <i>International Psychogeriatrics</i> , 9(1), 1-328.	This special issue focusing on the diagnosis of Alzheimer's disease (AD) is the product of a meeting of the International Psychogeriatric Association held in Geneva, Switzerland, in November 1996. The meeting was cosponsored by Alzheimer's Disease International, the European Federation of Neurological Societies, the World Health Organization, and the World Psychiatric Association. Current knowledge regarding the diagnosis of AD is reviewed in detail in individual articles grouped in the following areas: differential diagnosis, mental status and neuropsychological assessment, functional and global evaluations, neuroimaging and electrophysiologic assessment, neuropathologic assessment, and peripheral markers	http://www.ncbi.nlm.nih.gov/pubmed/9447425
Symptom Relief in terminal illness	1988	Symptom Relief in terminal illness (1998). World Health Organization: Geneva, Switzerland	Chapter 6 discusses features, causes, treatments and medications for delirium and dementia.	http://whqlibdoc.who.int/publications/1998/9241545070_eng.pdf
		Closing the gap, Dare to Care (2002). World Health Organization: Geneva, Switzerland	During 2001, WHO has highlighted the issue of mental health to the general public, government officials, and the public health community. Through the World Health Day, World Health Assembly, and World Health Report, WHO and its Member States have pledged their full and unrestricted commitment to this public health area. The message has been clear and unequivocal: mental health – neglected for far too long – is crucial to the overall well-being of individuals,	http://www.who.int/world-healthday/previous/2001/files/whd2001_dare_to_care_en.pdf

			<p>societies, and countries and must be universally regarded in a new light. As the world's leading public health agency, WHO has the role and obligation to ensure that science and reason rule over ignorance, superstition and stigma. The WHO Mental Health Global Action Programme (mhGAP) follows from the events of 2001 to provide a clear and coherent strategy for closing the gap between what is urgently needed, and what is currently available to reduce the burden of mental disorders, worldwide. This five year initiative will focus upon forging strategic partnerships to enhance countries' capacity to comprehensively address the stigma and burden of mental disorders. Through focusing on priority conditions, the initiative will increase governments' awareness and responsiveness to mental health issues; enhance the quality and effectiveness of mental health prevention, treatment and rehabilitation services; reduce stigma and discrimination; and by doing so, take important steps toward reducing the burden of a range of conditions and enhancing the mental health of the population.</p>	
<p>Prevention of Mental Disorders A Summary Report</p>	<p>2004</p>	<p>Prevention of Mental Disorders A Summary Report (2004). The World Health Organization: Geneva, Switzerland.</p>	<p>This Summary Report has been prepared by the editors of Prevention of Mental Disorders: Effective Interventions and Policy Options which will be published by Oxford University Press in 2005. The editors have selectively chosen and in some cases adapted material from the chapters provided by the contributing authors to the full publication in order to give an overview of effective interventions and policy actions to reduce the risk of mental</p>	<p>http://www.who.int/mental_health/evidence/en/prevention_of_mental_disorders_sr.pdf</p>

			disorders (including dementia).	
Neurology Atlas: Country Resources for Neurological Disorders	2004	Neurology Atlas: Country Resources for Neurological Disorders (2004). The World Health Organization: Geneva, Switzerland	A comprehensive collection and compilation of information on neurological resources across 109 countries. The results confirm that the available resources including services for neurological disorders are markedly insufficient; in addition, there are large inequities across regions and income groups of countries. Urgent action is required to enhance the resources available to address the increasing burden of neurological disorders including dementia.	http://www.who.int/mental_health/neurology/neurogy_atlas_lr.pdf
What are the palliative care needs of older people and how might they be met	2004	What are the palliative care needs of older people and how might they be met (2004). The World Health Organization-Europe.	This is a Health Evidence Network (HEN) synthesis report on the palliative care needs of older people and how they might be met. Ageing populations are characteristic of many countries. More people will need help at the end of life, in a social context of changing family structure and wider migration, employment and ageing of potential care-givers. Despite evidence of dramatically increased need for supportive and palliative care, this area has been relatively neglected in health policy and research. Coordinated care allows more people to die at home, if they wish, and specialist palliative care is associated with a range of better outcomes for patients and their families. There is also some evidence for the role of palliative care for cardiovascular, respiratory and dementia patients. Although further research is important, the more pressing issue is to implement existing knowledge and sustain improvements in palliative care practice throughout health care systems.	http://www.euro.who.int/_d ata/assets/pdf file/0006/74688/E83747.pdf
Scaling up care for	2008	Scaling up care for mental,	Since countries with low and lower middle	http://www.who.int/mental

<p>mental, neurological, and substance abuse disorders</p>		<p>neurological, and substance abuse disorders (2008). Mental Health Gap Action Plan (mhGAP), World Health Organization</p>	<p>incomes have most of the global burden, and because they have limited human and financial resources, a strategy that focuses on these countries has the potential for maximum impact. <i>mhGAP</i> provides criteria to identify the countries which contribute most to the burden of MNS disorders and which have a high resource gap. This programme is grounded on the best available scientific and epidemiological evidence about MNS conditions that have been identified as priorities. It attempts to deliver an integrated package of interventions, and takes into account existing and possible barriers for scaling up care. Priority conditions were identified (including dementia) on the basis that they represented a high burden (in terms of mortality, morbidity, and disability); caused large economic costs; or were associated with violations of human rights. These priority conditions are depression, schizophrenia and other psychotic disorders, suicide, epilepsy, dementia, disorders due to use of alcohol, disorders due to use of illicit drugs, and mental disorders in children. The <i>mhGAP</i> package consists of interventions for prevention and management for each of these priority conditions, on the basis of evidence about the effectiveness and feasibility of scaling up these interventions. <i>mhGAP</i> provides a template for an intervention package that will need to be adapted for countries, or regions within countries, on the basis of local context.</p>	<p>health/mhgap_final_english.pdf</p>
<p>Caring of the Frail, demented and dying. An Interview with</p>	<p>2010</p>	<p>Caring of the Frail, demented and dying. An Interview with Muriel Gillick (2010). Bulletin of the World Health</p>	<p>Even if we can make elderly people generally healthier, we will never eliminate all their health problems. In particular, we currently</p>	

Muriel Gillick		Organization, 188 (9): 641-716.	have no prospect of being able to alleviate or prevent one of the biggest causes of disability in the very old: dementia. The number of people living with dementia is expected to double in high-income countries over the next 40 years, and to increase fourfold in low- and middle-income countries. And even if we can keep most people healthy for most of their lives, we are all going to die. For most people that means a period of very poor health and dependency leading up to death.”	
Aging With Dignity. World Health Histories	2010	Gillick, M. (2010). Aging With Dignity. World Health Histories, The World Health Organization.	Describe historical dualism Define what I mean by people who are frail, demented, or dying. Explain why attending to needs of these groups is important. Capture what it is like to be in these groups: – Describe physical needs – Demonstrate psychosocial/existential concerns – Show what allows for aging with dignity.	http://www.who.int/global_health_histories/seminars/presentation42a.pdf
Intervention Guide for mental, neurological, and substance use disorders	2010	mhGAP Intervention Guide for mental, neurological, and substance use disorders (2010). Mental Health Gap Action Programme, World Health Organization.	The mhGAP Intervention Guide (mhGAP-IG) for mental, neurological and substance use disorders for non-specialist health settings, is a technical tool developed by WHO to assist in implementation of mhGAP. The Intervention Guide has been developed through a systematic review of evidence followed by an international consultative and participatory process. The mhGAP-IG presents integrated management of priority conditions using protocols for clinical decision-making. The priority conditions included are: depression, psychosis, bipolar disorders, epilepsy, developmental and behavioural disorders in children and adolescents, dementia , alcohol use disorders, drug use disorders, self-harm/suicide and other significant emotional	http://www.who.int/bulletin/volumes/88/9/10-030910/en/index.html

			or medically unexplained complaints. The mhGAP-IG is a model guide and has been developed for use by health-care providers working in non-specialized health-care settings after adaptation for national and local needs.	
Palliative care for older people: Better Practices	2011	Palliative care for older people: Better Practices (2011). The World Health Organization-Europe.	Recommendations to improve end-of-life care in hospitals include: educating staff members, identifying and assessing the people who need care, implementing care pathways and ensuring access to specialist palliative care teams (2). Such care has to meet the needs of older people, who often have co morbid illnesses, such as cardiovascular disease, arthritis, dementia or sensory loss and die from diseases other than cancer. Meeting these multiple needs in the hospital setting demands skill and good teamwork between specialists, including geriatricians, oncologists, cardiologists, palliative care clinicians, pharmacists, psychologists, social workers, dieticians, nursing staff, speech therapists and chaplains, at different stages of the illness	http://www.euro.who.int/_data/assets/pdf_file/0017/143153/e95052.pdf
Role of Acetylcholinesterase inhibitors.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Role of Acetylcholinesterase inhibitors. The World Health Organization: Geneva, Switzerland.	Acetylcholinesterase inhibitors should not be considered routinely for people with dementia in non-specialist health settings in low and middle income countries. Acetylcholinesterase inhibitors may be considered only in mild to moderate Alzheimer's Disease, where adequate support and supervision by specialists is available. Consideration should be given to adherence and monitoring of adverse effects, which generally requires the availability of a carer. Baseline structured cognitive and functional assessment should	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q1_acetylcholinesterase_en.pdf

			be carried out. Follow up should be carried out on regular basis at least every 3 months and treatment needs to be terminated in case of non-response.	
Role of Memantine.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Role of Memantine. The World Health Organization: Geneva, Switzerland.	Memantine should not be considered routinely for people with dementia in non-specialist health settings in low and middle income countries. Memantine may be considered only when diagnosis of moderate to severe Alzheimer's Disease has been made, with adequate support and supervision by specialist. Consideration should be given to adherence and monitoring of adverse effects, which generally requires the availability of a carer. Baseline structured cognitive and functional assessment should be carried out. Follow up should be carried out on regular basis at least 3 monthly and treatment needs to be terminated in case of non-response	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q2_memantine_en.pdf
Conventional and atypical antipsychotics and antidepressant (Trazodone) for behavioural and psychological symptoms in people with dementia.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Conventional and atypical antipsychotics and antidepressant (Trazodone) for behavioural and psychological symptoms in people with dementia. The World Health Organization: Geneva, Switzerland	Thioridazine, chlorpromazine or trazodone should not be used for the treatment of behavioural and psychological symptoms of dementia. Haloperidol and atypical antipsychotics should not be used as first line management for behavioural and psychological symptoms of dementia. Where there is clear and imminent risk of harm with severe and distressing symptoms, the short term use of haloperidol or atypical antipsychotic medications may be considered, preferably with specialist inputs. To the extent possible, informed consent and agreement should be	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q3_conventional_atypical_en.pdf

			obtained from the person and carer with regard to balance of risk and benefit	
Role of antidepressants in people with dementia and associated depression.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Role of antidepressants in people with dementia and associated depression. The World Health Organization: Geneva, Switzerland.	In people with dementia with symptoms and/or signs suggestive of moderate or severe depression, use of selective serotonin reuptake inhibitors may be considered by non-specialist health care providers. In case of non-response after at least 3 weeks, they should preferably be referred to mental health specialist for further assessment and management.	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q4_antidepressants_en.pdf
Cognitive and psychosocial interventions.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Cognitive and psychosocial interventions. The World Health Organization: Geneva, Switzerland.	Cognitive interventions applying principles of reality orientation, cognitive stimulation and/or reminiscence therapy may be considered in the care of people with dementia. Health care providers should be trained for delivering these interventions and family members should be involved in delivery of these interventions.	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q5_cog_psycho_interventions_en.pdf
Diagnosis of Dementia	2011	mhGAP Evidence Resource Centre: Dementia (2011). Diagnosis of Dementia. The World Health Organization: Geneva, Switzerland.	Non-specialist health care providers should seek to identify possible cases of dementia in the primary health care setting and in the community after appropriate training and awareness raising. Brief informant assessment and cognitive tests should be used to assist in confirming these cases. For a formal dementia diagnosis, a more detailed history, medical review and mental state examination should be carried out to exclude other common causes of cognitive impairment and decline. Training should be provided to non-specialist health care providers to diagnose dementia at first or	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q6_diagnosis_en.pdf

			second level health care	
How to Deliver a Diagnosis of Dementia	2011	mhGAP Evidence Resource Centre: Dementia (2011). How to Deliver a Diagnosis of Dementia. The World Health Organization: Geneva, Switzerland.	People with dementia and their family members should be told of the diagnosis subject to their wishes in this regard keeping in mind the cultural sensitivities and after some preparatory work to determine their preferences. If diagnosis is disclosed it should be accompanied with relevant information appropriate to culture and understanding of people with dementia and family members, and with a commitment of ongoing support and care that can be provided by health and other services.	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q7_deliverdiagnosis_en.pdf
Role of Medical Review	2011	mhGAP Evidence Resource Centre: Dementia (2011). Role of Medical Review. The World Health Organization: Geneva, Switzerland	People with dementia should receive an initial and a regular medical review (at least every 6 months) and appropriate care. In people with dementia presenting with behavioural symptoms, a complete physical assessment and medication review should be performed to identify any possible underlying precipitants for these symptoms. Appropriate management of these precipitants should be undertaken before considering use of psychotropic medicines and nonpharmacological interventions.	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q8_medical_review_en.pdf
Interventions for Carers of People with Dementia.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Interventions for Carers of People with Dementia. The World Health Organization: Geneva,	Psychoeducational interventions should be offered to family and other informal carers of people with dementia at the time when diagnosis is made. Training of carers involving active carer participation (e.g. role playing of behavioural problem management) may be indicated later in the course of illness for carers who are coping with behavioural symptoms in people with dementia. Carer psychological	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q9_intervent_en.pdf

			strain should be addressed with support, counselling, and/or cognitive-behaviour interventions. Depression in carers should be managed according to the recommendations for depression (see depression guidelines).	
Respite for Carers of People with Dementia.	2011	mhGAP Evidence Resource Centre: Dementia (2011). Respite for Carers of People with Dementia. The World Health Organization: Geneva, Switzerland	Where feasible, home based respite care may be encouraged for carers of people with dementia.	http://www.who.int/mental_health/mhgap/evidence/dementia/mh_dementia_q10_respite_en.pdf