# Mental Health Care

# A global perspective on depression

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The solution or problem ???

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# **Introduction**

The World Health Organization (WHO) defines depression as “a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration” (WHO, 2006). Depression is also known to weaken the immune system, making the depressed person more susceptible to physical illness (Videbeck, 2001). Depression can be classified as a chronic or recurring problem impairing one’s ability to take care of themselves. Depression can lead to suicide, accounting for the loss of around 850 000 thousand lives every year. The WHO (2001b) presents the following suicide statistics in three developed and two developing countries for males and females in 2001 per 100 000 people: Australia males 20.1, females 5.3; Canada males 18.7, females 5.2; Sweden males 18.9, females 8.1; India males 12.2, females 9.1. These statistics outline the magnitude of the problem worldwide. The majority of people suffering from depression are young people; merely 6 million of the 121 million people suffering from depression worldwide are elderly (WHO, 2001). Furthermore, it is estimated that by 2020, depression will be the 2nd largest global burden of disease for all ages and sexes (WHO, 2001).

Antidepressant medication and psychotherapy are the most commonly prescribed and used therapies worldwide (WHO, 2001). However both are significantly more common in developed Western countries. Unfortunately, this has lead to the gross over prescription of antidepressant medications now seen in first world countries (Videbeck, 2001). On the other hand, developing countries have a strong reliance on traditional healers and therapies, both medicinal and behavioral (Hales, 1996; Ngoma, Prince and Mann, 2003). Despite the massive global burden of depression, fewer than 25% of people who have depression worldwide have access to effective treatments (WHO, 2001). Videbeck (2001) indicates that this is related to a lack of resources, lack of trained health care providers and the social stigma attached to depression. Research shows that both psychosocial and genetic and biological factors play a part in a person’s depressive state (WHO, 2001).

# **Objective**

This paper will compare resources and treatment interventions for depression in an international perspective. To narrow the scope of the paper, the focus will be on Australia, Canada and Sweden (the developed world) and India and Uganda (the developing world).

# **Method**

A literature review was conducted using online databases, course literature, journal articles, mental health texts and Donald Duck Magazine.

# **Results**

## CANADA, AUSTRALIA & SWEDEN

All Canadians will be affected by mental illness, whether personal, in a family member, friend or colleague at some point in their lives (Public Health Agency of Canada (PHAC) 2002). Similarly in Australia, mental disorders constitute the leading cause of disability burden accounting for an estimated 27% of the total years lost due to disability (Australian Institute of Health and Welfare, 2004). Furthermore, Swedes currently have one of the highest rates of depression worldwide (WHO, 2001). All three countries are currently facing a similar burden of disease and similar trends in treatment methods for depression. Therefore, treatment therapies for depression in Australia, Canada and Sweden will be discussed simultaneously.

Social stigma and discrimination against people suffering from depression are issues in each of these developed countries. It causes those whom suffer from depression to avoid seeking health care and avoid following through with recommended treatments (PHAC, 2002). Combating stigma and preventing discrimination against people with depression and other mental illnesses is a public health priority to improve the mental health in the developed world.

There is currently a large focus on prevention campaigns as a means to avoid high treatment costs and minimize time spent on treatment. For example, in Australia, Beyond Blue (BB) is a not-for-profit organization that not only deals with depression, but also anxiety and related substance misuse disorders (Beyond Blue, 2005). Its key goal is to raise community awareness about depression and reduce stigma associated with the illness (Beyond Blue, 2005). BB also provides people living with depression and their carers with information about the illness and effective treatment options. Prevention and early intervention is also the primary concern of BB (Beyond Blue, 2005).

Efforts to prevent depression focus both on the individual level and system level. In Canada, the PHAC (2002) indicates that secure attachment, good parenting, friendship, social support, meaningful employment and social roles, adequate income, physical activity, and an internal locus of control are all variables that strengthen one’s mental health and reduce the impact or incidence of depression in the individual. Stewart, Gucciardi, and Grace (2004) indicate that social support is a protective factor against depression stating that people who lack emotional support have increased risk for experiencing depression than those with emotional support. PHAC information reinforces that supportive environments, stronger community action and programs to develop personal skills as well as reorienting health services are system level initiatives with multidisciplinary approaches enabling patients to have more control over their psychological and social determinants of mental health and achieve good mental health.

Primary prevention initiatives in all three countries focus on preventing traumas proven to be associated with depression and mental illness such as physical and sexual abuse, as well as teaching cognitive behavioral strategies to children early in life (PHAC, 2002).

PAHC (2002) indicates that treatment modalities for depression in Canada focus on psychotherapy combined with anti-depressant medications, as does Sweden. In Australia, cognitive behavioural therapy, interpersonal therapy, family therapy and psychodynamic psychotherapy are also common first-line treatments.

Howland (2006) found that electroencephalography technology can be used to determine the effects of particular antidepressant drugs on a patient’s brain activity and therefore identify an effective antidepressant for that patient. This can be used to predict treatment outcomes including adverse effects such as emergent suicidal ideation before the pharmacotherapy treatment has even begun. This will also eliminate unnecessary medication changes and encourage patient adherence.

Overall, there is an increased public acceptance of antidepressant use in Canada (Patten & Beck, 2004). This has lead to increasing trends of antidepressant in Canada (Patten & Beck, 2004), which is a growing trend also seen in Australia and Sweden (WHO, 2002). Moreover, antidepressants are the most commonly prescribed drug in Australia over any other drug for mental illness (AIHW, 2004). Nevertheless, according to Mathew (2006), evidence supporting the use of placebos designed to mimic the side effects of antidepressant drugs have been shown to work faster, and just as effectively as traditional antidepressants for many patients suffering from depression. Despite this research, antidepressant drugs are still the first line, most common treatment modality being used in Australia, Canada and Sweden to treat depression.

Experts in international mental health have signalled the potential for western health bodies to learn and benefit from tactics and attitudes employed in resource-poor developing nations (McKenzie, Patel & Araya, 2004; Patel, Araya & Bolton, 2004). This suggests that resources and outcomes in some of the poorer countries in fact mirror conditions in inner-city problem areas in developed countries (McKenzie et al., 2004). Although pharmacological interventions have been studied in some developing countries and found to be effective (Patel, Chisolm, Rabe-Hesketh, Dias-Saxena, Andrew & Mann, 2003), it is community-based group therapy that appears to be most successful (Bolton, Bass & Neugebauer, 2003; Patel et al., 2003). Again, this has significance for how the developed world treats depression, especially in light of what appears to be a dependence on expensive pharmaceutical methods.

Openness to 'alternative' therapies is increasingly important in effective treatment of depression (McKenzie et al., 2004; Kakar, 2003). It should be noted here that 'alternative' approaches are often only 'alternative' in western cultures, and may in fact form front-line treatment in developing and Eastern countries. These therapies are thankfully becoming more common practice in the developed countries, as the effectiveness of certain alternative therapies is astounding.

In Canada, complementary therapies commonly used include; ayurveda; nutrition and dietary interventions to prevent nutritional deficiencies; St. John’s Wort; prayer; meditation; acupressure; yoga; music therapy; and exercise. Matthew (2006), notes that reading self-help books or ‘bibliotherapy’ is also an effective treatment intervention for depression. Similarly, Australia has seen a shift towards complementary treatment therapies, the evidence of effectiveness of each is shown in Table 1:

Table 1: EVIDENCE-BASE OF ALTERNATIVE TREATMENTS FOR DEPRESSION in Australia

|  |  |  |
| --- | --- | --- |
| **GOOD EVIDENCE** | **SOME EVIDENCE** | **POOR EVIDENCE** |
| St John’s Wort (herb) | Acupuncture | Ginseng |
| Physical exercise | Light therapy (for non-seasonaldepression) | Lemon balm |
| Self-help books involving CognitiveBehaviour Therapy | Massage therapy | Painkillers |
| Light therapy (for winter or seasonaldepression) | Negative air ionisation (for winterdepression) | Vervain |
|  | Relaxation therapy | Colour therapy |
|  | S-Adenosylmethionine | Prayer |
|  | Folate | Chocolate |
|  | Yoga breathing exercises |  |

 (Jorm, Christensen, Griffiths, & Rodgers, 2002).

Nutritional therapy has received increasing attention as a potentially effective means of preventing and controlling depression. Studies show that patients with low levels of selenium had lesser symptoms of depression after being given supplement of selenium (Benton & Cook, 1991), and that Omega 3 (EPA) supplements also appear to improve states of depression (Stoll, Severus, Freeman, Rueter, Zbovan, Diamond, Cress & Marangell, 1999). Supplements of the vitamins B1, B2, B6, B12 and folic acid have also been shown to decrease rates depression as well as increase cognitive functions (Mischoulon, Burger, & Spillmann, 2000). Other studies have shown the importance of an adequate level of tryptophane in our daily meals, a lack thereof leading to acute depression in the studied patients (DesMaisons & Pert, 1999).

There has also been an increase in therapy involving animal interaction, for instance interface with dolphins has been found to alleviate symptoms of depression (Antonioli & Reveley, 2005).

In the United States, deep brain stimulation implants have recently received approval from the FDA, paving the way for internal stimulation of the brain in treatment-resistant depression (Mayberg, Lozano, Voon, McNeely, Seminowicz, Hamani, Schwalb & Kennedy, 2005). To date 22,000 patients have been treated with these implants.

## INDIA

India is a developing nation located in South-East Asia, with a population of 1,103,371,000 (WHO, 2006). The first mental health institution was recommended in 1946, prompting the growth and development of various mental health hospitals and individual projects. However, actual mental health policy was not enacted until 1982 (WHO, 2001c). Health expenditure for India comprises 4.8% of the GDP (Int $82), with 0.83% of the health budget spent on mental health care, a part of the primary care system (WHO 2006; WHO 2001c). There are community care facilities as well as privately funded care projects, both of which work to plug the gaps in the mainstream health system (WHO, 2001c). India's mental health policy includes a list of essential therapeutic drugs, which surprisingly only lists 2 antidepressants (WHO, 2001c).

Aside from financial resources, India also faces limited physical and human resources. As of 2001, for every 100,000 people in India there were 0.4 psychiatrists, 0.04 psychiatric nurses, 0.02 psychologists, and 2.5 psychiatric beds (WHO, 2001c). There are approximately 40 mental hospitals in India, which have recently come under intense scrutiny from the Human Rights council for various and extensive human rights abuses (WHO, 2001d).

Traditional interventions such as Unani, Siddha, Ayurveda, yoga and naturopathy, are integral parts of health and wellbeing in India - so much so that the Indian government's Ministry for Health and Family Welfare has a specific department relating to these disciplines (Department. of AYUSH, 2006):

* *Unani*

Unani is based on an ancient philosophy of four elements interacting to make up the body – Earth, Air, Water and Fire. The body is nourished by Humours – Blood, Phlegm, Yellow Bile and Black Bile – and health is achieved via equilibrium of the Humours. Disease is diagnosed through pulse assessment, and treatment is first ritual, then nutritional, followed by herbal, and as a last resort, surgery.

* *Ayurveda and Siddha*

Ayurveda and Siddha are similar systems, describing the body as a replica of the universe, as are food and drugs, irrespective of their origin. Both systems believe the body to be composed of five basic elements – Earth, Air, Water, Fire and Sky – as well as three humours, seven different tissues, and the waste products of the body. Equilibrium of these humours correlates to a state of health, and disease is indicated by imbalance in the humours. Both systems promote principles for maintenance of health and healthy living, diagnose disease through iridology and pulse, as well as utilizing herbal medicines in the treatment of disease.

* *Naturopathy*

Naturopathy is a system of healing that engages the body’s own power to health with the help of the five great elements of nature – Earth, Water, Fire, Air and Ether. Naturopathy promotes a simple, harmonic living, finding equilibrium between self, environment and society. Naturopathy engages the following treatments: hydrotherapy, air therapy (different air pressures and air temperatures), fire (temperature) therapy, space (fasting) therapy, mud therapy (superficial application), dietetic therapy, massage therapy, acupressure, magneto-therapy (strategically placed and charged magnets on the body), and chromo-therapy (use of colour through irradiation or administering via a charged medium).

* *Yoga*

Yoga is a lifestyle philosophy with many different variations, each of which cultivate a rational spiritual and positive attitude towards all life situations and events. Yoga describes nearly all mental, psychosomatic, and physical diseases as originating in the mind through incorrect ways of living, thinking, and eating, which is caused by attachment. Yoga promotes the cleansing of the spirit and body as a means of disease prevention, and aims to develop full efficiency and control of bodily systems, without drugs or surgical intervention.

(Dept. of AYUSH, 2006).

Though many patients prefer to consult traditional healers in the case of mental illness, it has been shown that only 28% of faith-healers presented with a person with ‘depressive’ symptoms, would diagnose a mental illness (Shankar, 2006).

Spiritual healing via Yogic, Hindu or Buddhist philosophy and practice is also common and appears to converge with traditional psychoanalysis therapies, in that individuals are capable of and responsible for change in their own lives and attainment of health and wellbeing (Kakar, 2003).

## UGANDA

Uganda is located in eastern central Africa, with a population of 24,700,000 (Ministry of Health, 2003). Mental health services in Uganda were decentralized in the 1960's, resulting in prison-like institutions, chronic staff and resource shortages, a lack of community services, and little funding (WHO, 2001c). Twenty four years of political chaos and war ensured that almost all infrastructure in Uganda had completely collapsed at the time of installation of a stable government in 1986. It was not until the mid 1990's that efforts were made to integrate mental health care into the primary care system, the Mental Health Act was integrated into the Health Services Bill, neurological drugs were included on the essential medications list, and standards and guidelines were developed for mental health care (WHO, 2006). Per capita health expenditure is currently 7.3% of the GDP (Int $75), with mental health expenditure recently increased to 1% of GDP (WHO, 2006). There are 0.05 psychiatrists for every 100,000 people (a total of 12 psychiatrists) in Uganda as opposed to 346 traditional healers for every 100,000 people (Hub, 2004).

Little information is available on the prevalence of depression in Uganda, however a recent study suggests that anywhere from 6% to 30% of the population could be classified as suffering from clinically significant depression (Ovuga, Boardman & Wasserman, 2005; Okello, 2006).

Generally, western medicine techniques are considered to be of little or no value where depression is concerned in Uganda. Traditional healers are preferred to treat mental illness, as in most other illnesses, and include herbalists, psychic healers and spiritualists (Okello, 2006). Eighty percent of Ugandans rely on traditional healers (Weisheit, 2003). There appear to be many reasons for this, both social - the healers are a welcome and acknowledged part of the community, and economic – the inaccessible 'western' health facilities and prohibitive costs of modern pharmacology (Weisheit, 2003).

Some research suggests that Ugandans are open to generalised 'self-disclosure in relation to depressive mood' (Ovuga et al., 2005). However, actual acknowledgment of depression as an illness requiring psychiatric attention carries a significant stigma in Uganda, often discouraging patients from making contact with a psychiatric health provider (Okello, 2006). Depression in itself is recognised as an 'illness of thoughts', most appropriately treated via traditional therapies. Psychiatric treatment was sought only when behaviour became socially disruptive, with non-disruptive symptoms ignored or misdiagnosed. This attitude has significant repercussions for mental health in Uganda, as it implies that patients must be suffering a greater severity of depression with or without psychotic symptoms before they access psychiatric help (Okello, 2006).

Depression is largely believed to be caused by the patient neglecting or abandoning traditions, 'incorrect' treatment of ancestors and spirits, mixing belief systems, or breaking taboos. In light of this 'social' view of depression (as opposed to medical), Ugandans believe only traditional healers and diviners possess the insight and have access to the supernatural therapies necessary to right these spiritual errors (Okello, 2006).

# **Discussion**

Much of the difficulty in applying techniques used in the developed world to the developing countries lies in the attitudes and beliefs surrounding depression and mental illness in general. Most simply, this is indicated in the lack of an accurate translation of depression as an illness in many of the languages found in developing nations (Ovuga et al., 2005; Okello, 2006; Patel et al, 2004.)

As global migration continues to grow and multicultural practices become the norm in many places, we are exposed to other cultures and different thinking patterns that gives us a broader perspective of the disease in the developed world.

The literature reviewed indicates that there is not one way to treat every person with depression. The step towards a more holistic treatment regime in both the developed and developing countries discussed shows potential for a breakthrough in the treatment of depression, as it provides more options for patients to be treated on an individual level. Individual treatment of patients has been proven effective in most areas of health care, mental health care being no exception. Treating each patient with the method that most suits them individually, whether it be through pharmacological means or by ‘balancing the humors’, would be much more effective than treating them according to the countries’ ‘norms’. This may be the key to future success in the minimization and management of the worldwide burden of depression, but requires an ‘open-minded’ approach from health professionals across the globe.

Furthermore, it appears that a collaborative approach between both developed and developing parties would be the best way to combat the ever-increasing burden of depression. Developing nations can benefit from the pharmacological and therapeutic experience of developing nations however are likely to require economic assistance in implementing these. Developed countries would do well to consider the efficacy of simple, community based support therapies that encourage re-entry into familiar social contexts, and which can be more viable in terms of resources.

# **Conclusion**

Depression continues to pose an enormous challenge to health resources and legislation in both developing and developed countries. Therapeutic patterns differ significantly between developed nations and their developing neighbors. The ‘first’ world countries rely heavily on relatively expensive, modern pharmacological treatments supported by individual ‘talk’ therapy. On the contrary, the ‘third’ world nations seem to prefer traditional holistic treatments supported by community based social support.

Though detailed analysis of the reasons for these differences is beyond the scope of this paper, the available data suggests that economic and political factors play a significant role.

There is currently an increase in exchange of ideas and therapeutic approaches between the developed and developing countries, something that we believe can only improve the mental health of people across the world.

**References**

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| --- |
| Antonioli, C. & Reveley, M.A. (2005) Randomised controlled trial of animal facilitated therapy with dolphins in the treatment of depression. *BMJ, 331(7527),* p. 1231. |
| Australian Institute of Health and Welfare (AIHW). (2004). *Mental Health services in Australia 03-04*. Accessed online at http://www.aihw.gov.au/publications/index.cfm/title/10193 on 18th October, 2006. |
| Benton, D. & Cook, R. *(1999).* The impact of selenium supplementation on mood*. Biological Psychiatry. 29(11*), 1092-1098*.* |
| Beyond Blue (2005). *Beyond Blue: the national depression initiative.* Accessed online at http://www.beyondblue.org.au/ on October, 21, 2006 |
| Department of AYUSH website (2006). Accessed online at http://indianmedicine.nic.in/ on 20th October, 2006. |
| DesMaisons K. & Pert, C. (1999) *Potatoes Not Prozac, A Natural Seven-Step Dietary Plan to Stabilize the Level of Sugar in Your Blood, Control Your Cravings and Lose Weight, and Recognize How Foods Affect the Way You Feel.* Unknown publisher. |
| Hales, A. (1996). West African Beliefs About Mental Illness. *Perspectives in Psychiatric Car.* 32(2), 23-29. |
| Howland, R. H. (2006). Electroencephalography Technology for Predicting Response to Antidepressant Medications. *Journal of Psychosocial Nursing.* 44 (10), 11-14. |
| Hub, S. (2004). Human Security Update – Northern Uganda. LIU Institute for Global Issues – University of British Columbia. Accessed online at http://www.up.ligi.ubc.ca/UpdateNU2004.pdf on October 22nd, 2006. |
| Jorm, A., Christensen, H., Griffiths, K. & Rodgers, B. (2002). Effectiveness of complementary and self-help treatments for depression. *MJA*. *176*, pp.84-96. |
| Kakar, S. (2003). Psychoanalysis and Eastern Spiritual healing traditions. *Journal of Analytical Psychology, 48,* pp. 659 - 678. |
| Mathew. J. (2006). Complimentary Therapies for Managing Depression. Accessed online from http://www.holisticonline.com/Remedies/Depression/dep\_editorial.htm on October 5, 2006. |
| Mayberg, H., Lozano, A., Voon, V., McNeely, H., Seminowicz, D., Hamani, C., Schwalb, J., Kennedy, S. (2005). Deep Brain Stimulation for Treatment-Resistant Depression.  *Neuron. 45(5)*, 651-660 . |
| McFarlane J. Anderson E.T. 2004 *Community as a Partner. Theory and Practice in Nursing.* Lippincott Philadelphia |
| McKenzie, K., Patel, V. & Araya, R. (2004). Learning from low income countries: mental health. *British Medical Journal, 329,* pp. 1138 - 1141. |
| Ministry of Health, Uganda. (2003). Statistical Abstract - Uganda Health. Accessed online at http://www.health.go.ug/docs/abstract2001.pdf on 15th October, 2006. |
| Mischoulon, D., Burger, J.K., Spillmann, M.K. (2000). Anemia and macrocytosis in the prediction of serum folate and vitamin B12 status, and treatment outcome in major depression. *Journal of Psychoses Research. 49(3)*, 183-187.  |
| Ngoma, M.C., Prince, M., & Mann, A. (2003). Common mental disorders among those attending primary health clinics and traditional healers in urban Tanzania. *British Journal of Psychiatry*. 183(Oct), 349 - 355. |
| Okello, E.S. (2006). Cultural explanatory models of depression in Uganda - PhD thesis. Department of Clinical Neuroscience, Psychiatry-HS, Karolinska Institutet, Sweden & Department of Psychiatry, Faculty of Medicine, Makerere University, Uganda. Accessed online at http://diss.kib.ki.se/2006/91-7140-823-1/thesis.pdf on 22nd October, 2006. |
| Ovuga, E., Boardman, J. & Wasserman, D. (2005). The prevalence of depression in two districts of Uganda. *Social Psychiatry and Psychiatric Epidemiology*. 40(6), 439 - 445. |
| Patel, V., Araya, R. & Bolton, P. (2004). Treating depression in the developing world. *Journal of Tropical Medicine and International Health.* 9(5), 539 – 541. |
| Patel, V., Chisholm, D., Rabe-Hesketh S., Dias-Saxena, F., Andrew, G., & Mann, A. (2003). The efficacy and cost-effectiveness of a drug and psycholgical treatment for common mental disorders in general health care in Goa, India: a randomised controlled trial. *Lancet, 361,* pp. 33 - 39. |
| Patten, S. B. & Beck, C. A. (2004). Major Depression and Mental Health Care Utilization in Canada: 1994 to 2000. *Canadian Journal of Psychiatry*. 49 (5), 303-309. |
| Public Health Agency of Canada (PHAC). (2002). *A Report on Mental Illnesses in Canada*. from Public Health Agency of Canada (PHAC). Accessed online at http://www.phac-aspc-gc.ca/publicat/miic-mmac/chap\_1\_e.html on October 5, 2006, |
| Shankar, B.R., Saravanan, B., Jacob, K.S. (2006) Explanatory models of common mental disorders among traditional healers and their patients in rural south India. *International Journal of Social Psychiatry.52(3),* 221–233. |
| Stewart, D. E., Gucciardi, E., & Grace, S. L. (2004). Depression. *Bio Med Central* *(BMC) Women’s Health Surveillance Report*, *4 (1),* pp. 11-19. |
| Stoll, A.S., Severus, E., Freeman, M.P., Rueter, S.,. Zboyan, H.A., Diamond, E., Cress, K.K., Marangel, L.B. (1999) Omega 3 Fatty Acids in Bipolar Disorder. *Arch. Gen. Psychiatry.56,* 407 – 412.  |
| Videbeck, S. (2001). *Psychiatric Mental Health Nursing.* Philadelphia: Lippincott. |
| Weisheit, A. (2003). Traditional Medicine Practice in Contemporary Uganda. *IK Notes - World Bank (International Bank for Reconstruction and Development), 54,* pp. 1 - 4. |
| WHO (2001). *Depression.* World Health Organization. Accessed online at http://www.who.int/topics/depression/en/ on 16th October, 2006. |
| WHO (2001b) *Suicide Rates* .World Health Organisation. Accessed online at http://www.who.int/mental\_health/prevention/suicide\_rates/en/index.html on 18th October, 2006. |
| WHO (2001c). *India - country profile*. Atlas - Country profiles on mental health resources. Accessed online at http://www.searo.who.int/LinkFiles/Health\_and\_Behaviour\_ind.pdf on 15th October, 2006. |
| WHO (2001d).*World Health Report 2001 - Mental Health: New Understanding, New Hope*. World Health Organisation: Switzerland. |
| WHO (2006) *World Health Report 2006*. Accessed online at http://www.who.int/countries/ind/en/ on 15th October, 2006. |