



CAGP

Bulletin

Bulletin of the Canadian Academy of Geriatric Psychiatry
Volume 10 Number 2, 2003

Contents

Editorial

- Do You Really Think it Will Help?3
LONN MYRONUK

Pharmacologia

- Atypical Antipsychotics: Malignant or Maligned?.....5
NATHAN HERRMANN

- President's Report8
DAVID CONN

The Health Brain Program

- An Innovative Approach to Health Promotion9
STEPHEN J. KIRALY

Evidence Based Medicine

- Is cannabis effective in the treatment of
disinhibited behaviour and affect?14

DR. R. VAN REEKUM

- Do NSAIDs reduce the risk of developing AD?14
DR. N.P.L.G. VERHOEFF

- Canadian Coalition for Seniors Mental Health.....16
SHELLY HABER, DAVID CONN, KEN LECLAIR

Submissions

- Research in Education Award17
Resident Award Programme17
Research in Education Grant18

The CAGP Bulletin is the official publication of the Canadian Academy of Geriatric Psychiatry. The Bulletin is published four times per year. Statements made by contributors or advertisers do not necessarily represent the views of the Academy. Acceptance of advertising by the Bulletin does not imply endorsement.

The Bulletin is distributed to all members of the CAGP. Members who would like their mailing address updated should contact the Manager of Membership Services and CME Administration, Canadian Psychiatric Association. The CPA maintains the membership list on behalf of the CAGP.

Non-members who would like to subscribe to the CAGP Bulletin may do so by sending correspondence to:

Dr. L. Myronuk
Editor, CAGP Bul.
1450 Waddington Rd.
Nanaimo, BC
V9S 4V9

The subscription rate for non-members is \$20 per year in North America, \$30 per year overseas (Canadian Funds). The CAGP is also committed to making the Bulletin available on the Internet.

Contributors: Submissions are welcome, and should be directed to the editor. Submissions are preferred via E-mail, in Rich Text Format (RTF) or Hypertext Markup Language (HTML). Direct submissions via E-mail attachment to myronuk@geripsych.com with a note as to the proposed format for the item-letter to the editor, opinion column, or peer-reviewed original research.

Advertising: Inquiries should be directed to the editor, at the address above.

DO YOU REALLY THINK IT WILL HELP?

Lonn Myronuk

"If you want faith, you just believe a little." - Sammy Hagar¹

I remember being taught as a first year psychiatry resident that across cultures there were three components shared by all healing endeavours, from shamanism to high-tech allopathy to any of the alternative or complementary modalities: the sharing of secrets; the instillation of hope; a shared system of beliefs². It is the last of these that has been of concern to me lately. Like others³, I am concerned that our increasing biotechnological and biostatistical sophistication as medical specialists may be letting patients slip through our fingers as we tighten our grips on their diseases.

To say that we share with our patients a system of beliefs regarding the causation and treatment of illness, what does this mean? It means that we have the same understanding as to the predisposing, precipitating, perpetuating and protective factors at play. A patient we met as undergraduate medical students was quite happy to be a smoker with asbestosis, as he reasoned that the "fire-proof" nature of asbestos would protect him from the ill effects of the smoke he inhaled. His belief and ours could not have differed more!

A new patient this month responded to a trial interpretation of her depressive

somatic symptoms as manifestations of unexpressed rage at being afflicted with disabling chronic medical illness (despite an obsessively healthy lifestyle) by becoming acutely anxious and unsettled. She felt better when her Consegrity⁴ "therapist" reassured her that she had never given off "energies" signifying anger issues. Clearly to her, I was wrong and her other "therapist" had a much better understanding of her. The patient was later able to return to me to discuss pharmacotherapy for her depression as a complementary adjunct to her other therapies. We were completely unsuccessful in sharing an understanding of the psychological determinants of her symptoms. Fortunately, we agreed on the role that antidepressant medications could play, so the therapeutic relationship and hope were preserved, and I believe that there is some chance that she may in time feel better.

It is easy to forget that what is obvious to us from our own perspective may not at all be obvious to others, even those who may not seem so very different from ourselves. This point was illustrated to me very directly in January, 2003 when an expert advisory⁵ group was convened to review the data on treatment effectiveness for cholinesterase inhibitors (ChIs). Colleagues from geriatric psychiatry, geriatric medicine, neurology, and primary care geriatrics assembled to discuss the randomized controlled trial data on

Lonn Myronuk; MD, FRCPC, Head Department of Psychiatry, Nanaimo Regional Hospital, 1200 Dufferin Cr., Nanaimo BC, V9S 2B7; myronuk@geripsych.com

ChI effectiveness published in the peer-reviewed literature. Seemingly non-controversial consensus statements were generated by the group, for example, "Cholinesterase inhibitors have modest effectiveness in improving cognition in mild to moderate Alzheimer-type dementia." Surprisingly, to me at least, was the lack of unanimity in endorsing even this conservatively worded type of statement. Throughout the day there was a small minority of votes cast against each of the consensus statements. Observing this led me to ponder: Just what is it that this group of colleagues believes about ChIs?

What troubles me is this: What do the patients and families of those physicians believe? Have they been encouraged by acquaintances at Alzheimer Society's meetings relating anecdotes about cognitive and non-cognitive changes that ChIs have helped bring about? Have they envied another's treatment response and waited impatiently for their turn to come up with the busy specialist, only to find frustration of hope from a doctor who "doesn't believe in those treatments"? I began to realize how easy it becomes for the political appointees who control the listings of our provincial formulary to assert (as has been done in British Columbia) that there are no convincing data showing effectiveness of ChIs, when there are practicing physician "experts" who hold that opinion as well.

In our quest for scientific rigour and healthy scepticism we have adopted the zeitgeist of "evidence-based medicine". In part, this has been from the recognition that belief and expectation can affect outcomes of interventions—the placebo effect. If scientifically rigorous medical practice entails minimizing the impact of the placebo effect in the clinical setting, then I believe that this does a dis-

service to patients and their families. "I think you have a good chance of feeling better, Mrs. S—," is a vague but hope-inspiring statement. "There is a 25 to 30 percent chance you may see modest improvement over six months, and you should look over these two pages of print-out on possible adverse effects, Mr. J—," is perhaps more accurate, but certainly less inspirational. I leave it as an exercise for the reader to consider which of the two hypothetical patients is going to feel better about their condition and prognosis. Indeed, which will have felt their encounter with the physician to have been the more "healing"?

Control for the effect of belief and expectation in experimental conditions, certainly. Capitalize on it in clinical conditions. If you believe the treatment can work, tell the patient, tell the family. They may have entered your office not knowing what they could believe. If you show them nothing they can believe in, they will leave believing in nothing. Hope and the chance of help will be that much farther away. If you want your patients to have faith in you and your prescriptions, you must believe in yourself and believe in your treatments. More importantly still, you have to show it.

Reference List

1. Hagar, S. Give to Live. 1987. Santa Monica, CA, Geffen Records.
2. Havenaar JM. Psychotherapy: healing by culture. *Psychother Psychosom* 1990; 53:8-13.
3. Bignami G. [The physician-patient relationship in the context of different medicines]. *Ann Ist Super Sanita* 1999; 35:499-504.
4. Lynch, M. A. and Harrison, D. Consegriety: wellness support program. <http://www.consegriety.com/index.jsp> 2003.
5. TREAD-BC Working Group. Treatment Effectiveness in Alzheimer Disease: TREAD-BC Consensus Conference. 2003. Vancouver, BC.

PHARMACOLOGIA

Atypical Antipsychotics: Malignant or Maligned?

Nathan Herrmann

It is an exciting time to be a geriatric psychiatrist. We have access to many new medications which offer treatment options for previously untreatable conditions, and drugs that appear to limit side-effects of particular concern to our elderly patients. On the other hand, with each new drug introduced comes concerns about adverse drug reactions that are often unanticipated based on the phase III trial data. The atypical antipsychotics have come under close scrutiny recently as a result of such safety concerns resulting in rigorous debate about their risk-benefit ratio. Some of these concerns have included weight gain, glucose dysregulation and diabetes mellitus, increased cholesterol and triglycerides, anticholinergic effects, sudden cardiac death, increased QTc intervals, and risk of cerebrovascular accidents. While the potential benefits of the atypical antipsychotics are supported by a variety of well designed RCTs which have been reviewed previously in this column, this article will focus on a couple of potential adverse drug events noted above.

There are now multiple case series and epidemiological studies which suggest that atypical antipsychotics increase the risk of weight gain and the develop-

ment of diabetes mellitus (1,2). It is important to note that weight gain may only be one potential cause of the diabetes in these patients and a number of patients have been described who developed glucose dysregulation and diabetes in the absence of significant weight gain. Proposed mechanisms which may lead to diabetes mellitus include antipsychotic effects on serotonin and dopamine sub-receptors which are known to effect insulin release, and direct effects on insulin receptors in the pancreas. There have been no RCTs to-date and almost all of these reports have focused on younger schizophrenics with no studies that have examined weight gain or diabetes in an exclusively geriatric population. This is a concern given that many elderly patients with schizophrenia and dementia are well below ideal body weight, and the pathophysiology of diabetes differs in the elderly compared to younger adults (3). In one of the only epidemiological studies to include elderly patients, Sernyak et al (4) concluded that treatment with atypical antipsychotics was significantly associated with diabetes with the exception of patients over 60 years of age where there was no association. Clearly, this potential safety concern requires further clarification. While the development of diabetes would be a major health concern for elderly patients, there is at the moment little data to support an increased risk of diabetes or significant

Nathan Herrmann, MD, FRCPC, Head, Division of Geriatric Psychiatry, University of Toronto, Sunnybrook and Women's Health Science Centre, 2075 Bayview Ave., Toronto, Ontario, M4N 3M5; Nathan.herrmann@swchsc.on.ca

weight gain in an elderly population treated with atypical psychotics.

Anticholinergic symptoms have long been the scourge of geriatric psychopharmacology. While risperidone has negligible anticholinergic effects, questions and concerns have arisen around the potency of olanzapine's M1 receptor antagonism. Early published research by Lilly scientists suggested that olanzapine was a potent M1 receptor antagonist in vitro (5). This was followed by a series of case reports suggesting that a number of elderly patients treated with olanzapine developed delirium and/or worsened confusion (6,7). In contrast to this data were the results of an RCT by Street et al (8) examining the use of olanzapine for BPSD. In this study, there were no significant differences in reported "anticholinergic-like" symptoms at doses of 5, 10, or 15 mg compared to placebo, and no significant changes in cognition. Using a measure of in vivo serum anticholinergic activity, Chengappa et al (9) noted relatively low levels of serum anticholinergic activity associated with olanzapine use (in fact five times lower compared to clozapine). Finally in a repeat of the initial in vitro receptor binding studies, using a more physiologically correct medium, Bymaster et al (10) noted M1 receptor binding which was far less potent than originally reported. In summary, while early concerns about olanzapine's anticholinergic effects were raised from in vitro and clinical reports, more recent in vivo, RCT, and in vitro data suggest these concerns have been overstated.

The adverse event 'du jour' is the potential association of risperidone use and cerebrovascular accidents (CVAs). This week, Janssen-Ortho Inc. published a "Dear Healthcare Professional" letter

prompted by data from a soon to be published Australian study of risperidone for BPSD in which 15 of 167 risperidone-treated patients suffered from a cerebrovascular event (6 strokes, 9 TIAs) compared to 3 of 170 placebo-treated patients. The company reviewed all their study data (4 studies which included 1,230 subjects) and noted that 4% of risperidone-treated patients (29/764) experienced CVAs compared with 2% of placebo-treated patients (7/466). While if true, such an association would be of great concern to clinicians, a number of significant methodological issues make drawing valid conclusions impossible. The risperidone RCTs enrolled many patients with significant vascular risk factors, previous CVAs and vascular dementia. Because there was no a priori hypotheses about the risk of CVAs, these risk factors were not well characterized and there was no matching for degree of risk or diagnosis. Since larger numbers of patients were treated with risperidone compared to placebo, it is possible that more patients with vascular disease and more potent risk factors were randomized to active treatment resulting in a greater "at risk" population. Furthermore, an examination of the detailed case records of the six suspected stroke patients in the Australian study from data on file reveals major questions about the baseline medical status of these patients and the diagnosis of stroke. For example, one individual clearly did not experience a stroke, but rather short-lived symptoms of drowsiness and slurred speech following a medication error in which she received 5 mg of risperidone instead of 0.5 mg. Of the remaining five patients who likely experienced a stroke, all had untreated or poorly treated vascular risk factors

including atrial fibrillation without ASA or warfarin prophylaxis, untreated hypertension, and poorly controlled diabetes mellitus. Finally, there is no obvious mechanism inherent in the clinical pharmacology of risperidone to account for an increased risk of CVAs. In data from the two large published studies (11,12), there were no reported changes in blood pressure, pulse rate, or electrocardiogram. Given the available data, any suggestions about causation or even a true association are premature.

So how does one answer the question: are atypical antipsychotics magliant or maligned? As usual, the answer lies somewhere firmly in the middle. All psychotropic drugs have potential adverse effects and the onus is on the clinician to utilize the best available evidence to choose an appropriate medication with the knowledge of his individual patients' specific risk factors, and practical considerations such as necessary route of administration and costs. Based on data available today, for most elderly patients, if an antipsychotic is the indicated therapy, the risk-benefit ratio for atypical antipsychotics will still be far more favourable compared to typical antipsychotics.

Reference List

1. Allison BD et al: Antipsychotic-induced weight gain: a comprehensive research synthesis. *Am J Psychiatry* 1999; 156: 1686-1696.
2. McIntyre RS et al: Antipsychotic metabolic effects: weight gain, diabetes mellitus, and lipid abnormalities. *Can J Psychiatry* 2001; 46: 273-281.
3. Gambert SR et al: Atypical presentation of endocrine disorders in the elderly. *Geriatrics* 1998; 43: 69-72.
4. Sernyak MJ et al: Association of diabetes mellitus with use of atypical neuroleptics in the treatment of schizophrenia. *Am J Psychiatry* 2002; 159: 561-566.
5. Bymaster F et al: Radioreceptor binding profile of the atypical antipsychotic olanzapine. *Neuropsychopharmacology* 1996; 14: 87-96.
6. Solomons K et al: Olanzapine use in the elderly: a retrospective analysis. *Can J Psychiatry* 2000; 45: 151-155.
7. Walker Z et al: Olanzapine in dementia with Lewy bodies: a clinical study. *Int J Geriatr Psychiatry* 1999; 14: 459-466.
8. Street JS et al: Olanzapine treatment of psychotic and behavioral symptoms in patients with Alzheimer's disease in nursing care facilities: a double-blind randomized trial. *Arch Gen Psychiatry* 2000; 57: 968-976.
9. Chengappa KNR et al: Anticholinergic differences among patients receiving standard clinical doses of olanzapine or clozapine. *J Clin Psychopharmacol* 2000; 20: 311-316.
10. Bymaster FP et al: Decreased binding affinity of olanzapine and clozapine for human muscarinic receptors in intact clonal cells in physiological medium. *Eur J Pharmacol* 2000; 390: 245-248.
11. Katz IR et al: Comparison of risperidone and placebo for psychosis and behavioral disturbances associated with dementia: a randomized, double-blind trial. *J Clin Psychiatry* 1999; 60: 107-115.
12. De Deyn PP et al: A randomized trial of risperidone, placebo, and haloperidol for behavioral symptoms of dementia. *Neurology* 1999; 53: 946-955.

PRESIDENT'S REPORT

David Conn

First I would like to invite you all to attend the next Annual Scientific Meeting of the Academy, which will take place immediately following the CPA Annual Meeting in Halifax on Monday, November 3, 2003. With Lilian Thorpe and Terry Chisholm taking the lead in organizing this event, I am certain that we will be treated to another excellent and valuable conference. I would like to thank Lilian and Marlene Smart for their terrific efforts in organizing our last meeting, which was held in Banff last November. Inspired, no doubt, by the magnificent scenery, all presenters were on great form and I would like to thank, in particular, Drs. Trevor Hurwitz and Kevin Lawless who gave superb keynote addresses. We were also treated to excellent presentations from our CAGP Lilly Fellow and Resident Award winners.

This past year has been an exciting one for the CAGP. As lead organization in the formation and ongoing organization of the Canadian Coalition for Seniors Mental Health, we can be proud of the

early successes of this project. In particular, we were delighted to learn that the Coalition, through the CAGP, has received a grant from Health Canada's Population Health Initiative. Please refer to the article in this edition of the Bulletin for more details regarding the Coalition. We very much want to see maximum involvement from members of the CAGP in the Coalition. If you would like to participate in any aspect of the Coalition's work, please do not hesitate to contact Shelly Haber, Ken LeClair or myself.

The Board of the Academy has decided to have a one-day meeting, which will focus on future directions for the Academy. The meeting will take place on May 26, 2003 in Toronto. This is the first time that such a meeting has taken place and we would very much like to hear feedback from members regarding your thoughts and ideas for the future. Please contact any of the members of the Board, or myself, if you have any suggestions.

Finally, on behalf of the Academy I would like to congratulate Dr. Joel Sadavoy, who is now the President Elect of the International Psychogeriatric Association. We would like to wish him well as he embarks on this important endeavor, with certainty that the IPA will flourish under his inspirational leadership.

David K. Conn,
Phone: 416-785-2456
Fax: 416-785-2450
E-mail: dconn@baycrest.org

THE HEALTHY BRAIN PROGRAM: AN INNOVATIVE APPROACH TO HEALTH PROMOTION

Stephen J. Kiraly

ABSTRACT:

Problem addressed: Brain disease is reaching epidemic proportions; brain health programs are largely non-existent. Physicians need new perspectives on brain care, beyond mere diagnosis of incurable brain pathology. Given that many common office conditions are major precursors to serious brain disease, physicians need definitive, assertive approaches to promote brain health and life quality. We also need clinical frames of reference in order to benefit from our neuromedical information explosion.

Objective of Program: The aim of the Healthy Brain Program (HBP) is to teach physicians and patients, in aesthetically acceptable ways, about the importance of brain health. The program succeeds by producing a cognitive shift, emphasizing the brain, like the heart, as a vital bodily organ. It elaborates and promotes awareness of eight well researched, evidence based, disciplines of biomedical knowledge, which are essential to brain health.

Main components of program: This approach to brain health evokes memories of the Healthy Heart Program (HHP) and

this is not coincidence. It uses strategies that underlie highly successful healthy heart programs and applies them to the most important organ – the brain. The eight precepts of brain health are: Safety, Nutrition, Fitness, Mental Activity, Sleep, Stress Management, Hormone Management and the Treatment of Existing Diseases. Each precept has an easily understood set of data and methodology efficacious in improving brain health.

Conclusion: This physician and patient education method remains user-friendly and patient-focused. It encourages healthy skepticism while identifying major components of brain health with safe action plans for health promotion and disease prevention.

INTRODUCTION:

What follows is an introduction and overview. The eight precepts of brain health will be reviewed in more detail in future issues.

Epidemiological data is clearly demonstrating that brain disease is reaching epidemic proportions (1,2,3). It is already the leading cause of age-adjusted disability worldwide and is projected to become the leading cause of death by the year 2040 (4). This is a cause of major concern because while we have successfully reduced mortality from cardiac disease (5) and other major killers (6), we have had no significant success in

For more information refer to:
<http://www.healthybrain.org>

Stephen J. Kiraly, MD, FRCPC, Clinical Assistant Professor, Department of Psychiatry, University of British Columbia Geriatric Psychiatrist, St. Vincent's Hospital & Vancouver Coastal Health Authority

reducing the occurrence of either common or uncommon brain disorders. Stroke alone, despite the falling incidence, is still the third leading cause of death (7). At a clinical practice level, we should be concerned that we have little to offer in terms of education and management principles to patients who are at risk for or are developing brain disorders. We believe that physicians must develop a new perspective on the brain - a perspective that goes beyond a focus on mere diagnosis of brain pathology, and incorporate principles of health promotion and disease prevention specific to the brain. Physicians must also develop new practice skills for brain health as we will become ever more challenged to not only diagnose and treat brain disease, but also to lower rates of incidence of brain disorders.

The designation of 1990s as the decade of the brain was a recognition that modern neuroscience has rapidly advanced our knowledge of the structure and function of the brain. New areas, such as psychoneuroendocrinology, began to emerge during this decade as did a new generation of well-designed, large scale studies of healthy and diseased aged human brains (8), resulting in a geometrically progressing accumulation of data. Synthesizing this information and translating it into prevention and treatment options is important for care providers and patients alike. Patients need fundamentally sound advice and practical approaches to improve brain health. Presently, anxious patients are being bombarded by conflicting and competing claims about treatments and procedures offered to achieve improved health and longevity. Unfortunately, this drive for information is taking place in a post-modern, anti-intellectual environment where junk sci-

ence proliferates (9) and accessible, accurate information is often unavailable.

The Healthy Brain Program (HBP) is a community and/or office based brain-health approach that draws from evidence based knowledge, debunks junk science, is user-friendly and patient-focused. The aim of the HBP is to give people a fresh look at the brain. It helps people to understand the brain as an organ of the body. Building on strategies that underlay the highly successful Healthy Heart Programs (HHP), the HBP generates interest and enthusiasm while providing information and techniques which are of immediate benefit to doctors and patients. The HBP has been delivered as lectures, seminars and interactive workshops. The participants are actively involved and encouraged to take ownership of brain health (the brain is our best health care system) by analyzing and discussing their own life habits and studying the precepts and practical procedures provided in the program. Lectures are typically an hour long while seminars and interactive workshops with audio-visual aids and Q&A can last for 2-3 hours for each category. To be most effective, the whole program requires about 20 hours of participation.

The HBP is based on eight categories of brain health, each of which is supported by sound, empirical research. Participants are introduced to each category and are provided both basic information and practical health strategies to improve their function in each area. The categories and core content are described below and a more detailed exposition of each of the imperatives of brain health will follow in future editions of this journal. The reader may obtain more information at the Healthy Brain Program site: <http://www.healthybrain.org>

- 1) **Safety:** Even mild head injuries are risk factors for early onset depression and dementia. Care practices begin at birth. Concussion and mild traumatic brain injury (MTBI) may initially be asymptomatic but subsequent impacts carry increasing risk. The young and old are high-risk groups for head injury (10).
- 2) **Nutrition:** There is nothing that a person who is in a good state of nutrition, can eat to improve brain health. Subclinical deficiency states are common, however, and they do have psychiatric presentations. Obesity, which is now an epidemic, is a risk factor for diabetes and vascular disorders, both of which lead to brain disease. We need to be aware of certain foods and “natural remedies” which can be toxic or dangerously interact with medications (11).
- 3) **Physical Exercise:** The effects of exercise are so profound that exercise comes closest to what might be a “Fountain of Youth”. It improves circulation and produces many natural brain boosting chemicals. Hormone balance, insulin resistance, sleep and general body chemistry are all improved. Exercise slows age related organ deterioration (12).
- 4) **Mental Exercise:** Brain stimulation increases blood flow and growth of specific brain regions and supports glial cells which feed neurons. Activity supports brain development and builds brain reserve against dementia (13).
- 5) **Sleep:** Sleep is a complex process that is vital not only to rest, but to consolidation of learning, optimal cognitive function, mood regulation, and feeling of well-being. Most people do not get enough sleep - those under stress, children and the elderly need more, not less sleep (14).
- 6) **Stress Management:** While stress is ubiquitous, as are diseases related to it, most patients are unaware of either the mechanisms of stress or the effects of stress on the brain. Excess stress hormones cause brain cell shrinkage and even neuron death (15).
- 7) **Hormone Management:** The brain is exquisitely sensitive to hormones. We need accurate information on the relationship between hormones and brain function. Orientation to benefits as well as hormone hazards are very important (16).
- 8) **Treatment of Risk Factors:** The most common causes for visiting doctors are depression, hypertension and diabetes (in that order) - each is an independent risk factor for early onset dementia. Physicians should be more assertive to educate and treat because evidence indicates that treatment will not only delay somatic end stage manifestations and death, but what is more important, treatment delays premature deterioration of life quality accompanying early onset of brain impairment (17).

DISCUSSION:

The HBP is the first program of its kind in Canada. As with all new programs, there is a requirement to ensure that it meets practice standards. First, the HBP has good content validity. The concept of the eight pillars of brain health and the

information base for each pillar clearly represent current knowledge and practice levels. Second, there is collateral evidence for the efficacy of this type of health promotion (18) and HHP's have been thoroughly studied (19,20), with results generally indicating that these programs have positive impact on management of health risk factors and health care costs (21,22, 23). The decline in mortality from acute myocardial infarction is due to, as much to primary and secondary prevention, as to improved therapeutic intervention (24). We uphold that the same applies to the brain. Third, the HBP has been generally very well received by consumers, physicians and health care providers. Physicians have rated the HBP as being well-organized, well-presented, and useful. Anecdotal reports from patients who used the HBP precepts have also been very positive. Perhaps the most promising features of these consumer reports are the comments that the HBP provides a sense of personal self control over quality of life and health. Feedback and evaluation from participants, obtained through questionnaires, has indicated a surprising degree of enthusiasm and a large proportion indicated that participation has resulted in behavioural changes. Patients have reported that the practical tips for brain health improvement are easy to carry out and often yield immediate results.

While these observations and conclusions on the HBP were merely from questionnaires, more sophisticated outcome studies would be interesting. Could Healthy Brain Programs impact on brain health as predictably and robustly as the Healthy Heart Programs have impacted on cardiovascular health? The implications are profound; it behooves us to explore this possibility.

CONCLUSIONS:

Our experience in working with the HBP has taught us two clear lessons. First, when people encounter brain impairment they are totally unprepared. Second, the average person has no idea of how to care for the brain. People simply do not know how the brain is built, what the brain does, or how to take care of it. The unfortunate result is that people often turn to junk science for explanations of the brain and to dangerous supplements or strange dietary practices as a means of coping with brain disorders. The HBP's response to this is to teach people more about the brain, providing information at a very basic level of how the brain works and what are safe, useful brain health practices.

The thrust of the HBP is that caring for the brain is no different from caring for other parts of the body, although there are issues that are specific to the brain – just as there are issues that are specific to the heart. We also believe that teaching people to care for the brain is an attainable goal. If we can achieve this, we will be able to improve our health care practices regarding the brain and its disorders and reduce the occurrence of such disorders in at-risk populations.

ACKNOWLEDGMENTS:

Special thanks to Dr. Stephen J. Holliday for his editorial assistance and to the staff of St. Vincent's Hospital, Department of Psychiatry, and to the staff of Coast Garibaldi Mental Health Services, who have shown enthusiasm and support during the development of this program.

Reference List

1. Canadian Study of Health and Aging Working Group. Canadian Study of Health and Aging: study methods and prevalence of dementia. *Can Med Assoc J* 1994;150(6):899-913.
2. Baldereschi M, Di Carlo A, Amaducci L. Epidemiology of dementias. *Drugs Today* 1998;34(9):747-58.
3. Siegal AP, Demographics of Dementia, US Psychiatric Congress, San Diego, 2000.
4. Murray C, Lopez A. *The Global Burden of Disease*, Boston, MA:Harvard University Press, 1996.
5. Hunink MGM, Goldman L, Tosteson ANA, et al. The recent decline in mortality from coronary heart disease, 1980-90. *Journal of the American Medical Association* 1997;277:535-542.
6. Shah CP. *Public Health and Preventive Medicine in Canada*. Toronto, ON:University of Toronto Press, 1994.
7. Tierney LM, McPhee SJ, Papadakis MA. (eds) *Current Medical Diagnosis & Treatment 2002*, Lange Medical Books, McGraw-Hill, New York. pp 1014-1017.
8. Snowdon D. *Aging With Grace*. New York, NY:Bantam Books, 2001.
9. Kaminer W. *Sleeping with extra-terrestrials: the rise of irrationalism and perils of piety*. New York, NY:Vintage Books, 2000.
10. <http://www.healthybrain.org/biblio/safety.htm>
11. <http://www.healthybrain.org/biblio/nutrition.htm>
12. <http://www.healthybrain.org/biblio/physex.htm>
13. <http://www.healthybrain.org/biblio/mentex.htm>
14. <http://www.healthybrain.org/biblio/sleep.htm>
15. <http://www.healthybrain.org/biblio/stress.htm>
16. <http://www.healthybrain.org/biblio/hormones.htm>
17. <http://www.healthybrain.org/biblio/disease.htm>
18. Annaswamy R, Gomes A, Beard JO, et al. A randomized trial comparing intensive and passive education in patients with diabetes mellitus. *Archives of Internal Medicine* 2002;162:1301-04.
19. Luepker, R V, Murray DM, Jacobs DR, et al. Community education for cardiovascular disease prevention: Risk factor changes in the Minnesota Heart Health Program. *American Journal of Public Health* 1994;84:1383-1393.
20. Chetwynd K, Felix D. Healthy People 2000 - The rationale and potential efficacy of preventive nutrition in heart disease: The Framingham Offspring-Spouse Study. *Archives of Internal Medicine* 1993;153:1549-1556.
21. Anderson J, Nixon J, Woodard J. The Healthy Heart Program Lowers Heart Disease Risk in a Rural County. *Journal of Extension* 1998;36(6):1-18.
22. Farquhar JW, Fortmann SP, Maccoby N. (1990). Effects of community-wide education on cardiovascular disease risk factors: The Stanford Five-City Project. *Journal of the American Medical Association* 1990;246:359-365.
23. U.S Department of Health and Human Services (USDHHS). *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC, DHHS Publication (PHS) 91-50213, 1990.
24. Tavazzi L. Clinical epidemiology of acute myocardial infarction. *Am Heart J* 1999;138(2)(Part 2):S48.

EVIDENCE BASED MEDICINE

The CAGP Bulletin is pleased to be able to present two evidence based reviews, based on work performed by educators and learners at the Baycrest Centre for Geriatric Care in Toronto. Requests or suggestions of topics for review or evaluation are welcome and can be directed to Dr. van Reekum via email, arizzuto@baycrest.org.

DR. R. VAN REEKUM

CLINICAL CASE

63-year-old man with disinhibited behaviour and affect requesting a trial of cannabis.

Clinical Question: Is cannabis effective in the treatment of disinhibited behaviour and affect?

Keywords: Cannabis (and related terms), behaviour (and related terms) or dementia or traumatic brain injury.

Findings: An RCT of dronabinol showed decreased agitation, improved affect, and increased body weight in patients with Alzheimer's Disease. A review of endocannabinoids shows that cannabinoids affect GABA, dopamine and glutamate in the basal ganglia. Two cannabinoids, Anadamide and Z-arachidonoyl glycerol, may decrease brain damage post-traumatic brain injury, based on rat / mouse studies showing reduced edema, infarct volume, hippocampal cell death and clinical recovery.

Clinical Recommendation: Preliminary evidence of efficacy of cannabinoids for agitation, disinhibition and appetite

stimulation in AD patients that warrants clinical consideration and careful evaluation when safer and regulated cannabinoid compounds become available.

Research Priority: An RCT of cannabis products, may be indicated for disinhibited affect and behaviour, as well as food refusal, in TBI and AD populations.

References

Volicer L, Stelly M, Morris J, et al. Effects of Dronabinol on Anorexia and Disturbed Behavior in Patients with Alzheimer's Disease. *International Journal of Geriatric Psychiatry.* 1997. 12:913-919.

Fernandez-Ruiz J, Becker L, Cabranes A, et al. Endocannabinoids and Basal Ganglia Functionality. Prostaglandins, Leukotrienes and Essential Fatty Acids. 2002. 66(2&3):257-267.

Payne H.C., Traumatic Brain Injury, Depression and Cannabis Use – Assessing Their Effects on Cognitive Performance. *Brain Injury.* 2000. 14(5):479-489.

Mechoulam R, Spatz M, Shohami E. Endocannabinoids and Neuroprotection. *Sciences's STKE (Electronic Resource): Signal Transduction Knowledge Environment.* 2002. 129:RE5. Review.

DR. N.P.L.G. VERHOEFF

CLINICAL CASE

An elderly patient asks whether she should take a non-steroidal anti-inflammatory drug (NSAID) to prevent Alzheimer's disease (AD).

Clinical Question: Do NSAIDs reduce the risk of developing AD?

Keywords: Alzheimer's disease esp.; dementia esp.; non steroidal anti-inflammatory agents esp.

Findings: Prospective, population-based cohort studies have in general shown that long-term (>2 years) NSAID use is associated with a reduced risk of AD (1-4), especially if such use occurs well before the onset of dementia (3). However, there is no protective effect against vascular dementia (1) or dementia in general (6) and one study observed an association between NSAID use and worsening MMSE scores (5). A cohort study among siblings at high risk of AD concluded that sustained NSAID use was associated with delayed onset and reduced risk of AD (7). Three case control studies are suggestive but not confirmatory of a protective effect of NSAIDs against AD (8-10).

Clinical Recommendation: Long-term NSAID use may reduce the risk of AD, provided such use occurs well before the onset of dementia. More recent exposure seems to offer less or little protection. NSAID use might increase the risk for or severity of some other types of dementia.

Research Priority: Observational study data appear to support the theory that NSAIDs have a protective effect against AD. The appropriate age to start, duration of use, relevant mechanism(s) of action, and risk-benefit ratios are still unclear. Also, it is presently not clear which NSAIDs are the most optimal for primary prevention of AD. Future prospective studies hopefully will help answer these questions. Recently initiated randomized prospective trials of NSAID for primary prevention of AD are unlikely to show effects with treatment until participants have been followed for several years. Therefore, follow-up in these prospective trials will need to be continued.

References

- 1 Veld BA, Ruitenbergh A, Hofman A, Launer LJ, van Duijn CM, Stijnen T, Breteler MM, Stricker BH. Nonsteroidal antiinflammatory drugs and the risk of Alzheimer's disease. *N Engl J Med.* 2001 Nov 22;345(21):1515-21.
- 2 Lindsay J, Laurin D, Verreault R, Hebert R, Helliwell B, Hill GB, McDowell I. Risk factors for Alzheimer's disease: a prospective analysis from the Canadian Study of Health and Aging. *Am J Epidemiol.* 2002 Sep 1;156(5):445-53.
- 3 Zandi PP, Anthony JC, Hayden KM, Mehta K, Mayer L, Breitner JC; The Cache County Study Investigators. Reduced incidence of AD with NSAID but not H2 receptor antagonists: the Cache County Study. *Neurology.* 2002 Sep 24;59(6):880-6.
- 4 Stewart WF, Kawas C, Corrada M, Metter EJ. Risk of Alzheimer's disease and duration of NSAID use. *Neurology.* 1997 Mar;48(3):626-32.
- 5 Fourrier A, Letenneur L, Begaud B, Dartigues JF. Nonsteroidal antiinflammatory drug use and cognitive function in the elderly: inconclusive results from a population-based cohort study. *J Clin Epidemiol.* 1996 Oct;49(10):1201.
- 6 Henderson AS, Jorm AF, Christensen H, Jacomb PA, Korten AE. Aspirin, anti-inflammatory drugs and risk of dementia. *Int J Geriatr Psychiatry.* 1997 Sep;12(9):926-30.
- 7 Breitner JC, Welsh KA, Helms MJ, Gaskell PC, Gau BA, Roses AD, Pericak-Vance MA, Saunders AM. Delayed onset of Alzheimer's disease with nonsteroidal anti-inflammatory and histamine H2 blocking drugs. *Neurobiol Aging.* 1995 Jul-Aug;16(4):523-30.
- 8 Beard CM, Waring SC, O'Brien PC, Kurland LT, Kokmen E. Nonsteroidal anti-inflammatory drug use and Alzheimer's disease: a case-control study in Rochester, Minnesota, 1980 through 1984. *Mayo Clin Proc.* 1998 Oct;73(10):951-5.
- 9 The Canadian Study of Health and Aging: risk factors for Alzheimer's disease in Canada. *Neurology.* 1994 Nov;44(11):2073-80.
- 10 Breitner JC, Gau BA, Welsh KA, Plassman BL, McDonald WM, Helms MJ, Anthony JC. Inverse association of anti-inflammatory treatments and Alzheimer's disease: initial results of a co-twin control study. *Neurology.* 1994 Feb;44(2):227-32.

Canadian Coalition for Seniors Mental Health

Shelly Haber, David Conn, Ken LeClair

In the last edition of the CAGP Bulletin we reported on the development of a National Symposium which focused on Gaps in Mental Health Services for Seniors in Long Term Care settings, April 2002. The Symposium was a huge success. There were over 90 registrants from across Canada representing national and provincial providers, consumers, policy makers, educators, researchers and private industry.

The participants agreed on the importance of taking immediate and effective action to address the mental health needs of seniors in long-term care settings. As a result, there was overwhelming support for the establishment of the Canadian Coalition for Seniors Mental Health with a phase one emphasis on long term care settings. Both Drs' David Conn and Ken LeClair have agreed to co-chair the Coalition and continue to provide leadership on this project.

The purpose of the Canadian Coalition for Seniors Mental Health is to promote seniors mental health by connecting people ideas and resources. There is a great wealth of information and resources across the country and in various sectors. Through intersectorial collaborative and participation the Coalition can support the sharing of knowledge and strengthening of available resources.

The participants identified many strategic initiatives that can be implemented on local, provincial and national levels. These initiatives include:

- Educating professionals, front line workers and family caregivers.
- Promoting and enhancing research opportunities to gain a better understanding of effective practices.

- Advocating for policies and programs to ensure high quality care and enhancing public understanding of related issues including ageism and stigma.
- Enhancing assessment and treatment of seniors to improve outcomes and quality of life.
- Providing an environment and programs designed to promote mental health; and
- Involving family members in the provision of care through education and awareness of seniors mental health issues.

Health Canada, Population Health Fund has provided an 18 month grant to further the goals of the Coalition and support the cataloguing of educational materials targeted to front line workers and informal caregivers. The Coalition has a newsletter which will be published quarterly as well as a web site which will go live by October 2003. The activities of the Coalition will be evaluated by Dr. Katherine Boydell at the end of the 18 months. The evaluation will provide a number of insights into what makes coalitions effective and how to improve future activities.

The current success of this project is demonstrated by the strength of the membership. Within eight months there have been over 60 national and provincial organizations that committed to participating in the initiative. Over 200 individuals have contacted us to wanting to identify a way of becoming involved. The size of the membership improves our capacity to network and promote opportunities. Additionally, a number of private sector organizations have indicated an interest in supporting our efforts through unrestricted educational grants. We would like to thank the following organizations for their support:

*Health Canada, Population Health Fund
Eli Lilly Canada
GlaxoSmithKline
Pfizer*

CAGP members are encouraged to participate on one or more of the working groups. For additional information about the Canadian Coalition for Seniors Mental Health please contact: Shelly Haber: 416.781.2886 or Email: s.haber@sympatico.ca

RESEARCH IN EDUCATION AWARD

PURPOSE: To encourage and stimulate research in geriatric psychiatry education and training at the undergraduate, postgraduate or continuing education level.

AWARD STIPEND: \$500

ELIGIBILITY: Residents or Fellows of Canadian psychiatry residency programmes and Canadian psychiatrists.

CRITERIA: Applicants should submit a completed write up of their educational research project in geriatric psychiatry education or training. The paper should be suitable for publication. The success-

ful applicant will be asked to present their study at the annual CAGP meeting.

DEADLINE: September 08, 2003

ADJUDICATION: The submissions will be reviewed by a representative panel of geriatric psychiatry educators from the Canadian Academy of Geriatric Psychiatry.

PLEASE SUBMIT PROPOSALS TO:

Dr. Catherine Shea
Canadian Academy of Geriatric Psychiatry
C/O Geriatric Psychiatry Outreach Program
Royal Ottawa Hospital
1145 Carling Ave., Ottawa, ON K1Z 7K4

RESIDENT AWARD PROGRAMME

PURPOSE: The Resident Award of the Canadian Academy of Geriatric Psychiatry is a programme whose primary purpose is to promote the development of future Canadian psychiatrists who will provide leadership in the areas of service, education and research in the field of geriatric psychiatry.

ELIGIBILITY: Canadian psychiatric Residents or Fellows with at least one year remaining in their programmes as of July 2003.

AWARD: The Award provides Residents with the financial resources to attend the Annual Academic meeting of the Canadian Academy of Geriatric Psychiatry and to network with members of the CAGP.

The successful applicant will be asked to briefly present the interim or final results of his/her research project or other scholarly activity at the CAGP Annual Meeting.

Following attendance at the annual meeting, if the full amount of the award

has not been used, the resident may elect to use remainder to support activities which promote his/her knowledge skills and experience in geriatric psychiatry i.e. other related courses/conferences, electives, books, journals etc.

AMOUNT: \$2,500 is available per year, for a maximum of 2 (two) years (max. \$5000).

APPLICATION DUE: June 27, 2003

TO APPLY, FORWARD: Letter by applicant detailing previous experience in geriatric psychiatry, plans for future geriatric psychiatry training, an outline of a proposed research project or other scholarly activity in geriatric psychiatry to be completed in the 2003- 2004 academic year, and future career goals.

Curriculum vitae, Letters of reference from the applicant's Postgraduate Director and Head of Division of Geriatric Psychiatry.

FORWARD APPLICATION TO:

See above

RESEARCH IN EDUCATION GRANT

PURPOSE: To encourage and stimulate research in geriatric psychiatry education and training at the undergraduate, postgraduate or continuing education level.

GRANT STIPEND: Maximum \$2500

ELIGIBILITY: Residents or Fellows of Canadian psychiatry residency programmes and Canadian psychiatrists.

CRITERIA: Applicants should submit a research proposal that contains a short review of educational issues in geriatric psychiatry education or training, a review of relevant literature, a research hypothesis, a description of the research methodology and a proposed budget.

Please indicate if this project is already partially funded from some other source. Qualitative or quantitative studies will be considered equally.

DEADLINE: September 08, 2003

ADJUDICATION: The submissions will be reviewed by a representative panel of geriatric psychiatry educators from the Canadian Academy of Geriatric Psychiatry.

PLEASE SUBMIT PROPOSALS TO:

Dr. Catherine Shea
Canadian Academy of Geriatric Psychiatry
C/O Geriatric Psychiatry Outreach Program
Royal Ottawa Hospital
1145 Carling Ave., Ottawa, ON K1Z 7K4