Message from the Editor

Dear fellow members,

It is with great pleasure that we bring you this issue of the CSAM Bulletin. It encompasses the great contributions of many members of our society, some new to the bulletin, while others are reliable “veteran contributors”.

The overall objectives and aim of the bulletin, is to update our members from across the country on significant changes and developments in our field, be it local provincial news, or global changes. We also hope to be able to update the membership on the work done by various CSAM committees on behalf of our membership, towards improving the overall communication and involvement of our members.

Many CSAM committees have been extremely active in the past few months, with significant involvement from many members, on many fronts. While it is difficult to capture in great detail the work that is being done, you will find some of the details on each committee’s work in this issue of the bulletin.

We hope that you find this issue both interesting and informative, and as always, we hope that you chose to contribute to the Bulletin, and share with us your expertise, clinical experiences, research and anything else that you feel would be worth while for the membership to know.

Respectfully yours,

Michael Varenbut
Editor in Chief
Membership Committee Report
By Michael Varenbut MD, CCSAM, CASAM, FASAM Chair

CSAM has 263 active members, of which there are 166 MD Members, 6 PhD Members, 10 Honourary Members, 72 Associate Members, 5 Retired Members and 4 Student Members.

It is with great pleasure that we welcome the following new members to CSAM:

<table>
<thead>
<tr>
<th>FULL NAME</th>
<th>MEMBER STATUS</th>
<th>PRIMARY CITY</th>
<th>PRIMARY PROVINCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrick Fay</td>
<td>MD</td>
<td>Vancouver</td>
<td>BC</td>
</tr>
<tr>
<td>Abu Arif</td>
<td>MD</td>
<td>Sydney</td>
<td>NS</td>
</tr>
<tr>
<td>Derek Boan</td>
<td>Student</td>
<td>Saskatoon</td>
<td>SK</td>
</tr>
<tr>
<td>Dianne Stackhouse</td>
<td>MD</td>
<td>Cambridge</td>
<td>NB</td>
</tr>
<tr>
<td>William Doran</td>
<td>MD</td>
<td>Wolfville</td>
<td>NS</td>
</tr>
</tbody>
</table>

As always, we are more than happy to accept new members to our so society, and look forward to the assistance of current members in recruitment. You will find a membership application form on page ##. This is also available online at the CSAM web site, at www.csam.org.

Since the last issue of the Bulletin, the membership committee has grown to include the following new members: Drs. Don Ling, Charl Els, John Fraser and Charles MacKay. The members have met several times, and have been working on a variety of initiatives to increase membership in CSAM. These initiatives may include a “member-get-a-member” campaign, “exit” questionnaires to help us understand why members do not renew membership, as well as a “direct invitation campaign”. We are also working on a membership directory, which will likely be launched together with our pending new CSAM web site.

In addition, the committee has finalized its “Terms of reference”, which are included below:

Terms of Reference
Membership Committee

Preamble:
The Membership committee has been convened on behalf of the CSAM board and membership to address issues of concern to the society and its membership with respect to membership in the society.

Purpose:
The purpose of the committee is to maintain and increase membership in the society. This will be accomplished through:

• Establishing and updating criteria for membership in the society.
• Issuing of membership certificates.
• Establishing campaigns to maintain and increase membership in the society.
Membership:
The committee will consist of a chair and a maximum of 6 members. Chair and members must be CSAM members. Terms of membership are subject to periodic review and Board approval.

Frequency of Meetings:
The committee will meet quarterly; 3 teleconference meetings and 1 “in person” to coincide with the annual CSAM Scientific Meeting, and more frequently as the need arises. Members are asked to commit to participate in a minimum of 50% of the teleconferences and to attend the “in person” meeting. Quorum at a meeting will be defined as 50% or greater of the committee members.

Decision Making Process:
Consensus. In the exceptional circumstance where consensus is unachievable, decisions will be decided by majority vote (50% + 1)

Reporting Process:
Committee will report on its activity regularly at board meetings and at the CSAM annual general meeting.

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**CSAM Committee Reports**

**Conference Planning Committee for CSAM 2007**

*By Dr. Jeff Daiter*

*Chair, CSAM 2007 Organizing Committee*

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**Mark your calendars for CSAM 2007 in Ottawa from October 11 – 14.**

I am pleased to report that efforts, both at the national and local committee levels, are on track to make this event a resounding success. This year’s conference theme is “Multiple Disciplines, Shared Cause: Connecting Professionals in Addiction Medicine”. As a result, the committee is strongly advocating for all CSAM members to spread the word about the conference in order to make a concerted effort to get as many physicians and allied health professionals to attend. The “Call for Abstracts” was met with numerous submissions for posters, presentations and workshop that spoke directly to this theme. The National Committee is currently hard at work trying to sort through them all to bring only the best to the audience that attends. There will also be post conference Main Pro C course on October 14th that will spotlight the topic of Alcohol and will prove to enhance physician’s knowledge in this focused area of Addiction Medicine. So, if you haven’t done so already, block off October 11 – 14, 2007 for this exciting event.

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**BC Report**

*Dr. David Marsh*

CSAM would like to welcome an esteemed colleague to Canada. Michael Krausz has recently arrive in Vancouver and taken up the role of LEEF Chair in Addiction Research. The Leading Edge Endowment Fund is a provincial funding stream which parallels the Canadian Research Chairs process and seeks to support cutting edge research and training in British Columbia through the establishment of endowed chairs. Dr. Krausz arrives from Hamburg where he previously headed one of the most productive clinical research units in Europe. Among his many contributions to the field are the design and initiation of the German Heroin Prescription trial, manualized psychotherapeutic interventions for addiction and the establishment and editorship of multiple journals including the European Addiction Research (one of the top 5 impact addiction journals). Michael is an experienced addiction psychiatrist with many years experience in opioid maintenance, family systems therapy and treatment of schizophrenia. We look forward to his contributions to clinical addiction research in Canada.
The Standards Committee met in April and our first task was to review and more clearly define the committee’s role. Terms of Reference were developed and are included following this report.

The application process for Certification with CSAM was also reviewed - no changes have been made. Information about this & application forms are available from the Secretariat.

**Terms of Reference**

**Standards Committee**

**Preamble:**
The Standards Committee has been convened on behalf of the CSAM board and membership to address issues of concern to the society and its membership with respect to standards of practice.

**Purpose:**
The purpose of the committee is to advocate for the ongoing development of “Best Practices” in addiction medicine & to advocate for & support training.

This will be accomplished through:

- Establishing minimum criteria for training and education for physicians in addiction medicine.
- Establishing standards of clinical practice for physicians-in-training and for those practicing addiction medicine
- Evaluating and reviewing, as requested, training for physicians in addiction medicine to ensure they meet set minimum criteria for Certification with CSAM.
- Advocating for the establishment of specialty status in Addiction Medicine with the Royal College of Physicians & Surgeons & with the College of Family Physicians of Canada
- Producing Public Policy Statements related to standards of practice as required on an ad hoc basis, and ensuring said statements remain current
- Engaging in two way communication with CSAM board and membership to ensure all involved are aware of changing issues with respect to standards.

**Membership:**
The committee will consist of a chair who is a member of the CSAM Board, and a minimum of four members. Chair and members must be CSAM members and CSAM Certificants with a minimum of five years of recognized leadership in the field. Terms of membership are subject to periodic review and Board approval.

**Frequency of Meetings:**
The committee will meet on an ad hoc basis by teleconference and 1 “in person” to coincide with the annual CSAM Scientific Meeting. Members are asked to commit to participate in a minimum of 50% of the teleconferences and to attend the “in person” meeting.

**Decision Making Process:**
Consensus. In the exceptional circumstance where consensus is unachievable, decisions will be decided by majority vote (50% + 1)

**Reporting Process:**
Committee will report on its activity regularly at board meetings and at the CSAM annual general meeting.
Website Committee Report

Dr. Jeff Daiter

CSAM’s newly created website committee, consisting of myself as Chair and Drs. David Marsh and Brian Fern as committee members, is pleased to announce that a new website is in development that will improve the overall appearance and functionality of our current web presence. Promising to be in both French and English, the site will hope to attract a much larger audience. Important events will be featured and an opportunity to dialogue with other colleagues will be available. Overall, this exciting project will enhance the position of CSAM within the world wide internet community and give our members and other interested visitors a viable portal into our ever growing society.

Opioid Agonist Committee Report

By Michael Varenbut  MD, CCSAM, CASAM, FASAM

Chair

Since the last issue, the committee members have been working on a variety of items from the terms of reference, as outlined in the past.

There is much to report on with respect to the status Suboxone™ in Canada.

Schering-Plough Canada (SPC) received NOC from Health Canada for Suboxone™ (buprenorphine hydrochloride and naloxone hydrochloride dehydrate) in May 2007.

As part of NOC, Health Canada mandated SPC to develop an accredited educational program for physicians, as a prerequisite to prescribing Suboxone.

According to Schering, commercial availability of Suboxone is scheduled for the end of October 2007.

As I am sure many of you are aware, there have been many physicians who have already undertaken educational programs in the prescribing of Buprenorpine.

At the time of this writing, we are seeking clarification from Health Canada and Schering — Plough, as to the exact status of the above process, further educational requirements, acceptance of past training, etc., so that we can update the membership further.

We are further attempting to ascertain the role of CSAM in the above process, and how we can best simplify the training / educational requirements for clinicians, to allow for the most efficient route to authorization from Health Canada for prescribing of the medication. Further requirements / guidelines and regulations may be forthcoming from each provincial regulatory body, which would also need to be respected and complied with.
# 2007 Membership Application Form

## Membership Type
- [ ] Regular Member – MD
- [ ] Regular Member – PhD Scientists
- [ ] Medical Student/Intern/Resident
- [ ] Retirees – MD or PhD
- [ ] Associate Member

## Applicant Information
- [ ] Dr.
- [ ] Ms.
- [ ] Mrs.
- [ ] Miss
- [ ] Mr.

Name: 
(First Name) (Middle Initial) (Last Name)

## Work Address
- [ ] Preferred Mailing Address

Address: 

City: 
Province: 
Postal Code:

Work Phone: 
Fax:

## Home Address
- [ ] Preferred Mailing Address

Address: 

City: 
Province: 
Postal Code:

Home Phone: 

## Email Contacts*

Email address: 

## Education History

Undergraduate Degree(s)/University/Year Graduated: 

Graduate Degree(s)/University/Year Graduated: 

Area of Specialty: 

## Current Employment:

Area of Employment: 
- [ ] Private Practice
- [ ] Treatment Centre
- [ ] Educational Facility
- [ ] Other (please specify):

Appointment(s) – Hospital/University/College Including Department:

<table>
<thead>
<tr>
<th>Percentage of time in research and clinical practice devoted to:</th>
<th>Percentage of time devoted to:</th>
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<tbody>
<tr>
<td>Addiction: %</td>
<td>Clinical Practice: %</td>
</tr>
<tr>
<td>Other aspects of healthcare: %</td>
<td>Research: %</td>
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<tr>
<td>Total: 100%</td>
<td>Teaching: %</td>
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<td></td>
<td>Administration: %</td>
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<td></td>
<td>Other: %</td>
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<td>Total: 100%</td>
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Please forward your application form with cheque or credit card information to:

CSAM Head Office 375 West 5th Avenue, Suite 201 · Vancouver, BC, V5Y 1J6 · Phone 604-484-3244 · Fax 604-874-4378 · Email: admin@csam.org
### Addiction Medicine Affiliations

- **American Society of Addiction Medicine (ASAM):**
  - [ ] Member
  - [ ] Certificate
  - Year of Certification/recertification: 
  - [ ] Fellow
  - Year of Fellowship: 

- **International Society of Addiction Medicine (ISAM):**
  - [ ] Member
  - [ ] Certificate
  - Year of Certification/recertification: 

**Are you interested in Canadian Certification in Addiction Medicine? (Member – MD only)**
- [ ] Yes
- [ ] No

### Topics of Special Interest in the Field of Medicine

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### Positions in the Society You Would Be Willing To Consider in the Future

- [ ] Board Member *(Please note: Associate members are not eligible for board positions)*
- [ ] Committee Membership:
  - [ ] Standards
  - [ ] Public Policy
  - [ ] Research
  - [ ] Education
  - [ ] Physician Health

### Referee and Curriculum Vitae

Please include a recent copy of your *Curriculum Vitae.*

All new members require a current CSAM member to act as a referee. A supporting letter from a current CSAM member must accompany all applications for Associate membership.

**Referee’s Name:**

Do you agree to have your name and office contact information included in a directory to be distributed to CSAM members only?
- [ ] Yes
- [ ] No

**Signature:**

---

### Payment Information

**Annual Fees:**

- [ ] Regular Member – M.D.: $100.00
- [ ] Medical Student/Intern/Resident: $25.00
- [ ] Regular Member – PhD Scientists: $100.00
- [ ] Retirees MD or PhD: $25.00
- [ ] Associate Member: $50.00

**Optional:** International Society of Addiction Medicine (ISAM) Dues – *(US $90.00 @1.17761, effective Nov 1, 2006)*

- [ ] ISAM Membership: $105.99

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*TOTAL PAYMENT: $*

- [ ] Cheque, Bank Draft or Money Order Payable to: *The Canadian Society of Addiction Medicine* or

- [ ] VISA/MC/AMEX (circle one) # _______________ Expiry Date _______________

Name on Card: ___________________________ Signature: _______________________

Please forward your application form with cheque or credit card information to:

CSAM Head Office 375 West 5th Avenue, Suite 201 - Vancouver, BC, V5Y 1J6

Phone 604-484-3244 - Fax 604-874-4378 - Email: admin@csam.org
Alberta News
Charl Els MD

Alberta’s addiction rates remain among the highest in Canada and the addiction rates in the workplace have reportedly increased dramatically. Based on the latest CTUMS release, the prevalence rates for the leading cause of preventable death and disease, namely tobacco smoking, have again remained unchanged in this province; notably well above the national average of 18% for those 15 years of age and above. Despite the relative affluence of the province, the Alberta Tobacco Reduction Strategy (ATRS) per capita investment in tobacco control remains substantially below the CDC’s recommendations for monetary investment in tobacco control, partially explaining the high prevalence and consumption rates. There is anecdotal evidence of ultra-low quit rates associated with the Smokers’ Helpline, and several questions on tobacco control in Alberta remain salient.

As reported in past editions, the ATRS has been the focus of negative media attention resulting from the investigation by the Auditor General into the affairs of a senior official. Since then, however, this tremendous setback resulted in an almost 100% turnover in staffing, leaving many a stakeholders with ambivalence, and uncertainty on how the ATRS will proceed to regain its status as a serious player in the national tobacco community. The outcomes of the ATRS consultation by AADAC are pending, and it is the hope that this agency will respond favorably to the recommendations made in the consultation. These recommendations called for measures like transparent and objective evaluation of the effectiveness of the Smokers’ Helpline, which has escaped transparent outcomes measurement. Another recommendation is for the meaningful involvement of physicians in the ATRS as well as the rest of AADAC, which has not occurred up to now. A copy of this stakeholder’s submission can be obtained from the writer. Members within the medical community remain concerned that meaningful input from organized medicine, CSAM or the AMA’s Section of Addiction Medicine, in the philosophy of care and the governance of all arms of AADAC remains elusive. The biggest price is paid by those suffering from the disease of addiction.

A silver lining on the tobacco front, however, was the introduction of tobacco reduction legislation by the Minister of Health, Hon. Dave Hancock. Bill 45, or the Tobacco Reduction Act, passed its second reading on the last day of spring sitting, and after the summer it will be presented for third reading in the legislature. The provisions in the bill includes 100% smoke-free workplaces and public places, a ban on smoking within a distance of doorways, windows and air intakes (with the distance to be prescribed by regulation), a ban on retail displays (applies to all stores, not just those accessible to minors), a ban on tobacco sales in hospitals and other health facilities, pharmacies (which the Alberta branch of Physicians for a Smoke-Free Canada has been advocating for by filing a complaint at the Alberta College of Pharmacists against each tobacco-selling pharmacist in the province) and, finally, stores that contain a pharmacy, and colleges and universities. The bill is available online at: http://www.assembly.ab.ca/bills/2007/pdf/bill-045.pdf

It is evident that, despite the challenges the medical community faces in terms of gaining acceptance into the addiction treatment setting, this is a historic time for tobacco control. Thanks to the sustained efforts of ASH and CSFA and its members, Bill 45 survived its second reading (which is ‘support in principal’, and which was
viewed as the most significant hurdle to jump before the end of the session). Regrettably, the bill will not come up for 3rd reading and will remain on the Order Paper until the commencement of the fall session on November 5. The main goals of those in tobacco control will now be to ensure the bill is not undermined before the fall session and its final passage.

In a setting where tobacco control is not usually at the center of attention, students and faculty at the University of Alberta witnessed a sequence of events that resulted in substantial changes in policy. In an unprecedented move in Canada, three faculties at the University of Alberta passed similar motions in a matter of weeks rejecting tobacco industry funding. One of these faculties was home to a researcher with a $1.5 million grant by the US Smokeless Tobacco Company. There remains to other allegedly tobacco industry funded researchers at the University of Alberta, and the alleged tobacco industry consultant within the Department of Psychiatry (which disqualified another faculty member from a specific funding opportunity) has not yet been identified.

In response to these events, the Faculty of Medicine and Dentistry was first to pass a motion to reject tobacco industry funding for research. The Faculty of Nursing followed suit soon afterwards, passing an even more stringent motion, and this was followed by the Center for Health Promotion Studies mimicking the act of the first two faculties. By this time, the majority of students and faculty members in the health sciences were already protected from tobacco industry influence, but a critical component remained unresolved. This was rectified early in June, when, despite active tobacco-funded lobby from within the U of A to boycott the School of Public Health’s council meeting and to sabotage the motion, the School of Public Health overwhelmingly passed the following motion:

“Be it resolved that the School of Public Health will not accept or administer funding (including direct or indirect, such as scholarships and consultancies) for any purpose (including research, advocacy, student support, infrastructure or other university-related activities) from the tobacco industry (including individual companies or their component parts that are engaged in the production, manufacture, distribution, promotion, marketing, or sale of tobacco or tobacco products as their primary business)

or from funds, foundations or people advocating directly or indirectly on behalf of the tobacco industry and any of its related products”.

Canada’s first School of Public Health, is facing its first ever accreditation review later in the summer, and the policy reform process was viewed by many as a valuable opportunity for ethical leadership. By banning tobacco funding, the U of A’s SPH has set a precedent for Canada, and aligned itself with similar policies already in place at other Schools of Public Health in the US, e.g. Harvard School of Public Health, LSU School of Public Health, U of Arizona School of Public Health, Ohio State University, UMDNJ, the Johns Hopkins School of Medicine, the MAYO clinic, the Karolinska Institute, and several other reputable institutions across the globe. It is anticipated that the Board of Governors at the University of Alberta will now be in a better position to consider a campus-wide ban on tobacco research and consultancy funding for faculty members. All eyes will be on the Board of Governors and Dr. Indira Samarasekera (President) for the next board meeting, to be held later in 2007.

This policy change in post-secondary settings, along with bill 45, prepares Alberta to proudly host the Canadian Council for Tobacco Control’s national conference on Tobacco or Health, which is to be held in Edmonton in October. More information on this event can be found on the website of CCTC: www.cctc.ca . This CCTC scientific meeting is sponsored by a number of local and national bodies, among others: Capital Health, AADAC, and is expected to showcase the work of some of the sponsors and the regions.

The emergence of damp housing initiatives also marks the possible advent of a new era of harm reduction in Alberta, where on face value abstinence-based treatment has always been the norm within the Alberta addiction treatment agency of the Alberta Government. However, with evidence for different approaches in harm reduction under review, the paradigm where medical input is excluded by design is becoming progressively of concern and this may no longer be serving the addicted population well.

The most vexing question remains: who assumes the primary mandate, responsibility, and accountability for
the prevention and care of addiction? Currently all funding and a total mandate is (and has been for the longest time) awarded to a non-medical agency that has historically excluded physicians from all levels of governance. The regional health authorities have been mostly excluded, and the status quo is in dire need of change. The mechanism by which addiction and health services integration will be achieved in Alberta remains elusive and remains subject to the political appetite of the day. Perhaps the time has arrived for a hybrid of mental health and public health sectors in the regional health authority context could be assuming the responsibility for addiction care, like is already the case in one region. In this context, legitimate allied providers’ roles are recognized, utilized, and valued. Earlier this year, in the CJP it was said: “The ideal of an available, accessible, universal, portable, affordable, and non-stigmatizing healthcare system will remain an elusive goal until addiction is granted its rightful place by policy makers and opinion leaders at the organizational level. It is time to challenge conventional wisdom and practice by challenging the current expectations and benchmarks so that addicted individuals can be accommodated (or rather, welcomed) in the public mental health system”. Alberta remains an outlier when it comes to the way it artificially separates addiction and health care. Could this explain the problems mentioned earlier?

Alberta is facing a period of unparalleled change in the context of tobacco control, and the hope is that this will translate into a process of the acceptance of evidence-based and integrated addiction treatment across the board for all addictions in Alberta.

References and key documents are available from the writer of this report.

Ontario News
Jeff Daiter MD

Physicians providing methadone services in Ontario continue to anxiously await the release of the report from Methadone Task Force. While completed on time for submission to the Minister’s office, the complexity of the matter has no doubt contributed to the delay. Nevertheless, all remain hopeful that there will be no significant changes to the Methadone Program and the report will speak more towards the expansion of services to those currently without appropriate access.

The new Executive of the Ontario Medical Association Section on Addiction Medicine has been working hard to ensure that point of care laboratory services in physician’s offices do not get limited in any fashion by the working group of the Medical Services Payment Committee (MSPC). The MSPC was established under the 2004 Physician Services Agreement to function as a standing committee reporting regularly to the Parties, and to the Physician Services Committee (PSC) as requested by the PSC. The MSPC has the responsibility of making recommendations to the Parties with respect to changes to the Schedule of Benefits for Physician Services fee schedule (‘Physician Schedule’) and other payment mechanisms. While changes to the Schedule of Benefits are at risk, the Section on Addiction Medicine has expressed a strong opinion to the working group that any change to eliminate codes within the Schedule will deleteriously affect the provision of care within Ontario, placing our patients and the communities in which they live in harms way.

Manitoba News
Morag Fisher MD

Development of a Protocol for Methadone Maintenance:
A group has been meeting to develop a Methadone Maintenance Protocol for Manitoba, as up to now we have not had any provincial guidelines. The group represents several interested parties including the Department of Psychiatry Co-occurring Disorders Program, the Winnipeg Regional Health Authority hospital based Addictions Unit & the Addictions Foundation of Manitoba. Staff of other addictions services have also been consulted & there has been input & support from the College of Physicians & Surgeons of Manitoba. Over the next few months there will be wider distribution of the draft document for review & comment from others working in methadone maintenance in the province.

In other news:
In the spring budget the provincial government did increase funding for addiction services so this new money should result in more secure funding for adult rehab services.
Substance abuse in Federal Corrections: Part I: Prevalence and Nature

by Dr. John R. Weekes

Reintegration Programs Division, Correctional Service of Canada and Department of Psychology, Carleton University and

Dr. Michael Bettman

Reintegration Programs Division, Correctional Service of Canada

Mission Statement, CSC

The article represents the first in a two-part series examining the issue of substance abuse in the federal prison system in Canada. Part I provides a brief overview of the prevalence and nature of substance abuse use and associated problems among federal offenders. Part II will describe the treatment model that has been developed to identify and respond to the needs of offenders who engage in problematic use of alcohol and other drugs. Together, this assessment and intervention approach integrates contemporary research and practice on substance abuse treatment with the most recent approaches to evidence-based approaches to correctional intervention, including the principles of “risk”, “need”, and “responsivity”.

Perhaps not surprisingly, CSC houses and supervises the highest concentration of individuals in Canadian society with the most serious, chronic, and debilitating problems with alcohol and other drugs. However, in order to fully understand the magnitude associated with this challenge, let us begin by briefly examining the extent of problematic substance use in Canada.

The overwhelming majority of Canadians consume alcohol in moderate and safe ways. Further, only a small minority have consumed cannabis and other drugs in the recent past. Indeed, the 2004 Canadian Addiction Survey (a national survey of Canadians’ use of alcohol and other drugs) revealed that, during the previous 12-month period, 13.6% of Canadians are considered to be high risk drinkers, 14.1% consumed cannabis, and consumed other drugs at a rate of about 1% per drug or less (1.9% of Canadians consumed cocaine).

In stark contrast, about 72% of federal offenders are identified as having some form of substance abuse problem upon arrival at a federal correctional institution. Upon further assessment using the Computerized Assessment of Substance Abuse (CASA), almost 50% of offenders have engaged in problematic alcohol use during the past 12 months and 70% engaged in problematic use of other drugs.

Of course, like others in society, offenders vary widely in terms of the severity of the substance abuse problems. Figure 1 displays this finding graphically by combining offenders’ scores on standardized measures of alcohol and drug abuse.

This pattern of results underscores the wide range of problem severity amongst offenders and suggests that 80% of the offenders assessed are in need of an intervention program. However, type, intensity, and duration of the services needed to fully address their problem vary widely as a function of the severity of their problem. Almost 28% have a low severity problem, 21% have a moderate problem, and 31% have very serious problems (substantial and severe categories combined). Finally, 20% do not engage in problematic use (although they may consume alcohol and other licit and illicit drugs). Part II of this series will outline CSC’s intervention response model in detail. Similar prevalence rates and patterns of severity
have been found in other correctional jurisdictions such as the US\textsuperscript{4} and UK\textsuperscript{5}.

Aboriginal offenders evidence significant problems with alcohol and other drugs – 38% of male Aboriginal offenders have serious problems with alcohol compared with 16% of non-Aboriginal males offenders. 71% of female Aboriginal offenders have a serious drug problem compared with 66% of female non-Aboriginal offenders\textsuperscript{6}.

Canadian federal offenders consume the broad range of drugs prior to their most recent arrest:

- Marijuana 85%
- Alcohol and other drugs 80%
- Cocaine 60%
- Tranquilizers 35%
- Opiates 30%
- Hallucinogens 24%
- Stimulants 25%
- Sedatives 20%
- Heroin 15%
- Inhalants 5%

The need for effective programming for this particular population is further enhanced given the strong relationship between problem severity and criminal activity. Just over half of the offenders under CSC supervision report that substance use and abuse was somehow related to one or more offences on their present conviction.\textsuperscript{7} Substance abuse is associated with a broad range of criminal activity:

- Driving under influence 94%
- Assault 69%
- Theft 66%
- Murder 58%
- Break and Enter 56%
- Robbery 56%
- Sexual Assault 45%

Further, the strength of the relationship between substance abuse and criminal behaviour increases with increasing problem severity. Of those offenders with the most serious substance abuse problems, 97% reported that they used on the day of the offence, while 87% reported that substance abuse was associated with their lifetime patterns of criminal involvement.\textsuperscript{8}

The spread of blood-borne pathogens such as hepatitis C (HCV) and HIV/AIDS continues to plague prisons systems in Canada and elsewhere. The rate of HIV/AIDS among Canadian federal offenders is (1.7%) is more than 10 times higher than the general population (0.13%). Rates of HIV/AIDS infection are particularly high among female federal offenders (8% in facilities in the Prairie region). The overall prevalence rate of HCV 23.6% is more than 20 times higher than the general population of the country and, once again, the rate of HCV infection is much higher for female offenders (41.2%) than for males (23.2%).

In this brief article we have only touched on some of the “highlights” regarding the magnitude and scope of the problem of offender substance abuse in federal corrections in Canada. Clearly, for us, the findings underscore the overwhelming challenges associated with addressing these problems from both criminal justice and public health perspective and need for an innovative and effective approach to reducing future risk for substance use and abuse and, in doing so, enhance public safety. In fact, substance abuse is perhaps the highest base rate factor contributing directly to offenders’ criminal behaviour. \textit{Part II} – our second article on this series – will examine the Service’s substance abuse intervention and supervision model.

Endnotes

\textsuperscript{1} The views expressed in the article are those of the authors and do not necessarily reflect the policies and perspectives of the Correctional Service of Canada or Public Safety Canada.
\textsuperscript{2} For correspondence: John R. Weekes, Ph.D., Senior Manager, Program Analysis, Reintegration Programs Division, Correctional Service of Canada, 340 Laurier Avenue West, Ottawa, Ontario, K1A 0P9, (613) 944-5333, weekesjr@csc-scc.gc.ca.
\textsuperscript{3} For example, the Alcohol Dependence Scale (ADS) and Drug Abuse Screening Test (DAST).

Research Corner
by Dr. David Teplin, Psy.D., C. Psych.

The impact of partner alcohol problems on women’s physical and mental health.

Violence by alcoholic men toward their partners is common, especially on the men’s drinking days; rates have been estimated at 50% to 65% in those starting alcoholism treatment. To assess how women’s self-perceived health status is affected by their partners’ alcohol-use disorders (AUDs), researchers analyzed interview data from a national alcohol co-morbidity study involving 43,093 non-institutionalized civilians in the U.S. Of the married or cohabiting female respondents, 2% reported living with a man who had a current alcohol problem. After adjustment for various possible confounders (e.g., women’s AUDs or other substance use, and socio-demographic factors), the risks for being the victim of a violent crime or for having had multiple injuries, mood and anxiety disorders, and fair or poor health in the previous year were two to three times higher in these women than in partners of men without current alcohol problems. The greatest risk was for a past-year mood disorder (odds ratio, 3.4). Again after adjustment for confounders, women with partner alcohol problems experienced 46% more negative life events during the past year, and they rated their psychological and physical quality of life 11% and 5% lower, than did women without partner alcohol problems. All of these differences were statistically significant. Only a minority of women have partners with a past or current AUD. However, these women are at increased risk for poor physical and mental health, and not all of this risk is explained by their own alcohol use or by being.

J Stud Alcohol 2007 Jan; 68:66-75; Dawson DA
Nucleus Accumbens D2/3 Receptors Predict Trait

Impulsivity and Cocaine Reinforcement

Stimulant addiction is often linked to excessive risk taking, sensation seeking, and impulsivity, but in ways that are poorly understood. We report here that a form of impulsivity in rats predicts high rates of intravenous cocaine self-administration and is associated with changes in dopamine (DA) function before drug exposure. Using positron emission tomography, we demonstrated that D2/3 receptor availability is significantly reduced in the nucleus accumbens of impulsive rats that were never exposed to cocaine and that such effects are independent of DA release. These data demonstrate that trait impulsivity predicts cocaine reinforcement and that D2 receptor dysfunction in abstinent cocaine addicts may, in part, be determined by pre-morbid influences.


Opioid Substitution with Methadone and Buprenorphine: Sexual Dysfunction as a Side Effect of Therapy

Opioid Substitution Therapy, primarily methadone, appears to be associated with alteration of serum levels of hormones related to normal sexual function. In males, opioids may act via: (1) inter-ference with the normal production of hypothalamic and pituitary regulatory hormones (LH, FSH, GnRH), (2) elevation of serum prolactin, (3) direct action on the testes to suppress testosterone production. While elimination of other common medical and psy-chiatric etiologies for sexual dysfunction is warranted, replacement of abnormally low serum testosterone may effectively
treat libido or erectile dysfunction, and potentially delayed orgasm or anorgasmia. Replacement of abnormally low androgens in women on OST may also improve libido as well as mood. Abnormalities in the menstrual cycle are thought to be transient and may not require alteration of OST dosing. Patients with refractory sexual dysfunction and a stable course in terms of their opioid use disorder may respond to reduction in the dose of their OST agent, with methadone likely being of greater significance here than buprenorphine. In light of the paucity of studies in the area of sexual dysfunction as an adverse effect of buprenorphine, more research is needed, utilizing larger patient populations and examining more thoroughly specific types of dysfunction in both male and female populations.


**Psychopathology among cannabis-dependent treatment seekers and association with later substance abuse treatment.**

This study determined the proportion of psychiatric treatments for disorders not due to substance use among a cohort of subjects (n = 3,114) seeking treatment for cannabis dependence. Data were retrieved from Danish treatment registers. Cases were compared with a representative sample, which was randomly selected from the general population according to age and gender (n = 15,570). Cannabis users were followed, and reentry into substance abuse treatment was used as an outcome deploying Cox regression analysis. The proportion of treatment for all psychiatric disorders was much higher among cases than among controls: schizophrenia (odds ratio [OR] = 7.9; 95% confidence interval [95% CI] = 6.1–10.2), bipolar disorders (OR = 4.9; 95% CI = 2.8–8.5), other affective disorders (OR = 7.6; 95% CI = 6.1–9.5), and personality disorders (OR = 17.3; 95% CI = 14.5–20.5). All in all, 40.7% of cases, compared with 5.2% of controls, had received psychiatric treatment (OR = 12.5; 95% CI = 11.3–13.8). A history of psychiatric treatment was associated with increased rates of reentry into substance abuse treatment, in general (OR = 1.35; 95% CI = 1.20–1.53), specifically for cannabis (OR = 1.26; 95% CI = 1.07–1.48) and opioid (OR =1.56; 95% CI = 1.23–1.99) dependence. This is the first study to show that the proportion of psychiatric treatment is much elevated among subjects seeking treatment for cannabis dependence, and that a history of psychiatric problems is associated with higher rates of reentry into substance abuse treatment.


**Client and counselor attitudes toward the use of medications for treatment of opioid dependence**

Attitudes, perceived social norms, and intentions were assessed for 376 counselors and 1,083 clients from outpatient, methadone, and residential drug treatment programs regarding four medications used to treat opiate dependence: methadone, buprenorphine, clonidine, and ibogaine. Attitudes, social norms, and intentions to use varied by treatment modality. Methadone clients and counselors had more positive attitudes toward the use of methadone, whereas their counterparts in residential and outpatient settings had neutral or negative assessments. Across modalities, attitudes, perceived social norms, and intentions toward the use of buprenorphine were relatively neutral. Assessments of clonidine and ibogaine were negative for clients and counselors in all settings. Social normative influences were dominant across settings and medications in determining counselor and client intentions to use medications, suggesting that perceptions about beliefs of peers may play a critical role in use of medications to treat opiate dependence.

Journal of Substance Abuse Treatment 32 (2007) 207– 215; Traci Rieckmann, Marilyn Daley, Bret E. Fuller, Cindy P. Thomas, Dennis McCarty,
Relapse-onset factors in Project MATCH: the Relapse Questionnaire.

Recent drinking is common among patients with alcohol dependence who have received treatment. This study assessed whether certain types of relapses are more likely to recur, are more severe, or are more amenable to a particular psychosocial therapy. Researchers examined data from 592 of 952 outpatients with alcohol dependence that had been randomized in a larger trial to receive motivational enhancement therapy, cognitive-behavioral therapy, or twelve-step facilitation therapy. These 592 subjects had experienced a relapse (i.e., drinking after being abstinent for at least 14 days) and completed the relapse-onset section of the Relapse Questionnaire, which assesses patient-perceived influences that contribute to relapse. Relapses were divided into 3 types: negative affect/family influences, craving/cued, and social pressure. When relapses recurred, they were often (about half the time) the same type as the initial relapse. Social pressure relapses were most likely to repeat (58% of the time). Negative affect relapses were the most severe (i.e., associated with a greater number of drinks consumed per day). The 3 therapies affected the overall risk of relapse similarly. However, motivational enhancement therapy offered less protection than the other therapies against social pressure relapse.


Influence of Attention-Deficit/Hyperactivity Disorder Symptoms on Methadone Treatment Outcome

A review of 687 consecutive admissions to a Midwestern methadone maintenance program was undertaken to establish the prevalence of ADHD symptoms and their association with treatment outcome. Of the 687 admissions, 396 (58%) patients self-reported experiencing one or more ADHD symptoms during the two weeks prior to admission, and 131 (19%) patients reported ADHD symptoms that significantly interfered with functioning in daily activities. At nine months post-admission, the patients who reported significant symptoms of ADHD were able to reduce their drug use but were less likely to have achieved abstinence than those who did not report significant symptoms (p<0.001).

The authors discuss the importance of screening for ADHD symptoms in methadone treatment programs and propose interventions believed helpful in improving management of ADHD symptoms and improving outcome.


Associations between Alcohol, Heroin, and Cocaine Use and High Risk Sexual Behaviors among Detoxification Patients

The purpose of this study was to assess associations between substance use (alcohol to intoxication, heroin, and cocaine) and sexual activity, high risk sexual behaviors, and STD among detoxification inpatients (n ¼ 470). Participants were surveyed on past 30 day substance use, past 6 month sexual behaviours, and STD in the past 6 months and over 24 months of follow-up. Logistic regression models adjusted for demographics found that cocaine use was significantly associated with being sexually active (OR adj ¼ 2.3, 95% CI ¼ 1.1–4.8) and selling sex (OR adj ¼ 2.6, 95% CI ¼ 1.3–5.3). Alcohol and heroin were not significantly associated with sexual activity, high risk sexual behaviors or STD in this sample.


Neurobiology of Cocaine Addiction: Implications for New Pharmacotherapy

The development of pharmacotherapies for cocaine addiction has been disappointingly slow. However, new neurobiological knowledge of how the brain is changed by chronic pharmacological insult with cocaine is revealing novel targets for drug development. Certain drugs currently being tested in clinical trials tap into the underlying cocaine-induced neuroplasticity, including drugs promoting GABA or inhibiting glutamate transmission. Armed with rationales derived from a neurobiological perspective that cocaine addiction is a pharmacologically induced disease
of neuroplasticity in brain circuits mediating normal reward learning, one can expect novel pharmacotherapies to emerge that directly target the biological pathology of addiction.

The American Journal on Addictions, 16: 71–78, 2007; Peter W. Kalivas.

Predicting Long-Term Stable Recovery from Heroin Addiction: Findings from a 33-Year Follow-Up Study

Heroin addiction is increasingly being recognized as a chronic relapsing condition, but relatively little is known about long-term recovery processes among addicts who attain and maintain long periods of abstinence. This study is to identify predictors of long-term stable recovery from heroin addiction based on 242 heroin addicts that have been followed for more than 30 years. Results showed that recovery and non-recovery groups did not differ in deviant behaviors and family/school problems in their earlier lives. Both groups tried formal treatment and self-directed recovery (“self-treatment”), often many times. While the non-recovered addicts were significantly more likely to use substances in coping with stressful conditions, to have spouses who also abused drugs, and to lack non-drug-using social support, stable recovery ten years later was predicted only by ethnicity, self-efficacy, and psychological distress. These findings suggest that in addition to early intervention to curtail heroin addiction, increasing self-efficacy and addressing psychological problems are likely to enhance the odds of maintaining long-term stable recovery.


Evaluation of cognitive functioning in 101 patients before opiate detoxification: Implications in setting up therapeutic strategies

Many studies have brought to light the facts that repeated use of drugs significantly influences one’s cognitive functions, and that cognitive problems could interfere directly with one’s capacity to participate in a rehabilitation program. In this research, we used the Global Deterioration Scale (GDS) to assess the cognitive status of 101 hospitalized patients in an opiate detoxification program. The results reveal that a majority of the tested patients present cognitive abnormalities to varying degrees of severity. Furthermore, these cognitive deficits are correlated with four Addiction Severity Index (ASI) scales (medical, alcohol use, drug use, and psychiatry, respectively). Considering the results, because cognition is a major issue in detoxification and rehabilitation programs, simple cognitive screening (as with the GDS) coupled with a particular interest in some aspects of a patient’s amnesias could lead to better management of opiate-dependent patients.


Borderline personality disorder and persistently elevated levels of risk in 36-month outcomes for the treatment of heroin dependence

The aim of this study was to determine the effects of borderline personality disorder (BPD) on 36-month outcomes for the treatment of heroin dependence. The design was a longitudinal cohort study. Participants were 429 heroin users enrolled in the Australian Treatment Outcome Study, interviewed at 36-month follow-up. The BPD group enrolled in significantly more different treatment episodes across follow-up, but there was no difference in the cumulative number of treatment days received. At 36 months, there were no group differences in sustained or current heroin abstinence, daily heroin use or level of poly-drug use. BPD patients maintained significantly higher levels of crime, injection-related health problems, heroin overdose, major depression and poorer global mental health. In contrast to 12-month follow-up, at 36 months there were no group differences in the proportions that attempted suicide over the preceding 12 months or had recently borrowed used injection equipment. The clinical picture provided some cause for optimism since 12-month follow-up. Despite this, BPD patients maintained elevated risk levels across a number of domains. The fact that these risks were maintained indicates that this is a group that requires specific clinical attention for BPD-related risks.

Addiction, 2007; 102, 1140–1146; Shane Darke, Joanne Ross, Anna Williamson, Katherine L. Mills, Alys Havard & Maree Teesson
Concurrent buprenorphine and benzodiazepines use and self-reported opioid toxicity in opioid substitution treatment

The aim of this study was to examine concurrent buprenorphine and benzodiazepine consumption and to compare opioid toxicity symptoms induced by methadone and buprenorphine, examining factors associated with the reporting of these symptoms. The design was a self-report cross-sectional survey. The setting was 5 needle syringe programs and 5 opioid substitution treatment services in Melbourne, Australia. Participants were 250 people who had experience with methadone or buprenorphine. Eligibility criteria were current or previous methadone or buprenorphine use. A structured questionnaire was used that covered demographic characteristics; current treatment and drug use, concurrent use of buprenorphine and benzodiazepines, route of administration and source of medications, and opioid toxicity symptoms in association with methadone and buprenorphine consumption. Of those reporting buprenorphine use, two-thirds reported concurrent benzodiazepine use, with a median dose reported of 30 mg diazepam equivalents. A greater number of opioid toxicity symptoms were reported in relation to methadone consumption compared with buprenorphine. Those reporting opioid toxicity with buprenorphine were more likely to report intravenous use compared with those reporting opioid toxicity with methadone. The risk of opioid toxicity appeared greater with methadone compared with buprenorphine, despite high levels of benzodiazepine consumption and injection being reported in relation to buprenorphine use. The prevalence of buprenorphine injection and the normalization of methadone-induced sedation are two findings that merit further investigation. Establishing recommendations as to the safest and most effective way to manage benzodiazepine-using people in opioid substitution treatment is necessary for the optimization of treatment for opioid dependence in poly-drug-using individuals.

Addiction, 2007; 102, 616–622; Suzanne Nielsen, Paul Dietze, Nicole Lee, Adrian Dunlop & David Taylor.

Alcohol and Hepatitis C Mortality among Males and Females in the United States: A Life Table Analysis

Evidence from previous studies suggests that heavy alcohol use (HAU) exacerbates the rate of fibrosis progression in the liver and results in increased probability for premature death among patients with hepatitis C virus (HCV) infection. The current study uses population-based mortality data to investigate whether heavy drinking affects the age of death among individuals with HCV and, if so, whether this effect differs between men and women. A total of 7,263,163 death records in the United States between 2000 and 2002 were drawn from the Multiple Cause of Death (MCD) public-use data files compiled by the National Center for Health Statistics (NCHS). International Classification of Diseases, Tenth Revision (ICD-10) codes were used to identify the presence of HCV (B17.1 and B18.2) and HAU (as indicated by alcohol-induced medical conditions, F10 and K70) either as the underlying cause or as one of the contributing causes of death. The deaths were divided into 4 distinctive cause-of-death categories: HCV without HAU, HAU without HCV, HCV plus HAU, and all others. The mean ages of death and the cumulative probabilities of death derived from multiple-cause life table were compared across these categories. Hepatitis C virus deaths showed an excessive prevalence of HAU when compared with non-HCV deaths. Compared with deaths of HCV without HAU, the mean age of death was shortened for deaths of HCV plus HAU (from 55.1 to 50.0 years among males, and from 61.0 to 49.1 years among females). The cumulative probability of death before age 65 was much higher for the latter than the former group (0.91 vs. 0.68 among males, and 0.88 vs. 0.47 among females). While HCV alone showed a disproportionate effect on premature death in males, HAU presented a stronger effect in females, resulting in a “catching-up” effect that diminished the gender difference in age of HCV death. This study provides mortality-based evidence to further establish heavy alcohol consumption as one of the key risk factors contributing to premature deaths from HCV in the United States. More importantly, this study, for the first time, presents empirical evidence that alcohol consumption affects men and women differently in HCV mortality.

Client Factors Associated with Length of Stay in Methadone Treatment among Heroin Users who inject Drugs: Quantitative Analysis of State-level Substance Abuse Treatment Utilization Data

The objective of this study was to examine, for a population of 8,258 adult injection drug users (IDUs) who all had entered a Massachusetts licensed methadone maintenance treatment program (MMT) between 1996 and 2002, client factors associated with remaining in MMT for a minimum of 1 year after program entry. Two binomial logistic regression models were developed. The first model examined the association between age, sex, race, ethnicity, parental status, employment status, educational status, health insurance status, homelessness status, having injected drugs in the past month, residential treatment use, number of overall treatment admissions, and whether a client’s longest consecutive stay in MMT had lasted for 1 year or more. Second, to examine the stability of the statistical relationships identified in the first logistic regression model, a second logistic regression model examined whether there were significant differences in client level characteristics between those who used MMT for 6 months or less compared with their counterparts. Those who were older, women’ those who were not homeless, those who resided with their children, those who had public health insurance, and those who had not used residential treatment were significantly more likely to have stayed in MMT for at least 1 year or more. In contrast, those who were younger, males, homeless, did not live with children, had no insurance, and had used residential treatment were significantly more likely to have stayed in MMT for 6 months or less compared with their counterparts. Those who stayed in MMT for 1 year or more were more likely to have stable lives compared with those who dropped out of MMT before a year. Providing services to improve MMT clients’ employment, housing and family stability may help improve MMT retention rates. Second, clients with a history of having used residential substance abuse treatment were more likely to stay in MMT for a shorter time period compared with their counterparts. The extent to which treatment bifurcation is a matter of choice or related to other factors needs to be further explored.


Factors affecting the outcome of methadone maintenance treatment in opiate dependence.

This study measured rates of ongoing heroin abuse among patients on methadone maintenance treatment (MMT) and sought to identify patient and treatment characteristics associated with poorer outcome. The study was carried out at an outpatient drug treatment clinic in the UK and included all patients who were on MMT during a 3 month period in 2004. Treatment response was measured from analysis of opioid-positive urine samples. Of the 440 patients assessed, 63% were male and their mean age was 32 years (range 17 to 52 years), and 163 patients (37%) had a co-morbid psychiatric illness. The average methadone dose was 74 mg/day. On average, 71% of urine samples were opioid negative. Shorter time in treatment (less than 24 months), lower doses of methadone, cocaine abuse, and intermittent benzodiazepine abuse were each found to be significantly associated with lower rates of illicit-opioid abstinence. Outcomes were not associated with gender, age, or accessing counselling. Dual-diagnosed patients actually tended to have higher rates of abstinence. The authors conclude that MMT patients who abuse cocaine and benzodiazepines are at increased risk of continuing opioid abuse, and higher doses of methadone might be necessary to prevent illicit opioid abuse.

Alcohol and Drugs

The Local Burden.

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Alcohol and nicotine are two common causes of morbidity and mortality in Canada, and they are both licit drugs. Illicit drugs obtained and/or used, like crystal methamphetamine, cocaine, ecstasy and morphine, contribute to wreaking havoc on Canadian lives, extracting a heavy financial burden on the taxpayers, creating a loss of taxable income, causing a disruption in the workforce, and interruption in social relationships.

The following article, based on statistical data of a number of patients with admission diagnoses of alcohol and/or drug abuse, attempts to throw light upon the financial cost to a local hospital in the Prairie North Health Region of Saskatchewan in the years 2004-2005 and 2005-2006.

North Battleford Union Hospital is a secondary 90-bed hospital with a catchment population of approximately 40,000, of which the ratio of Aboriginal to Non-Aboriginal is approximately 1:8. There are altogether seven First Nation Reserves in the vicinity of North Battleford. The article does not take into account the number of patients seen in the emergency room and subsequently discharged without a hospital admission.

A description of how data was collected is indicated below.

Data was collected using information from the abstracting program MED2020 for the years 2004-2005 and 2005-2006. Abstracted data was collected using the following ICD-10-CA codes included; F10 Mental and Behavioural Disorders due to Use of Alcohol, F11 Mental and Behavioural Disorders due to Use of Opioids, F12 Mental and Behavioural Disorders due to Use of Cannabinoids, F14 Mental and Behavioural Disorders Due to Use of Cocaine, F16 Mental and Behavioural Disorders Due to the Use of Hallucinogens, and F19 Mental and Behavioural Disorders Due to Multiple Drug Use and Use of Other Psychoactive Substances which determined all the drug admission.

There were 365 inpatient admissions coded within the F10 section of ICD-10-CA in 2004-2005, and 358 inpatient admissions coded in 2005-2006. The number of repeat inpatient admissions ranged from 2-5 in 2004-2005 and from 2-7 in 2005-2006 (see Table 1: Admissions- Alcohol). For drug cases a total of 222 inpatient admissions were coded within in the F11-F16 sections of ICD-10-CA for 2004-2005 and 225 inpatient admissions were coded for 2005-2006. The number of repeat inpatient admissions for 2004-2005 was 2-6 and for 2005-2006 were 2-4 (See Table 4: Admissions- Drug).

The alcohol admissions showed the following statistics; a total of 723 admissions occurred between 2004 and 2006. The ratio between male and female patients was 468:255 (See Table 2: Statistics-Alcohol.) Of the male percentages 31% were aboriginal and of the females 22% (See Figure 1: Aboriginal and Gender- Alcohol) Based on daily average costs the total expenses for alcohol admissions in 2004-2006 was $5,770,164.00 (See Table 3-Expenses-Alcohol).

There was a total of 447 drug admissions between the years 2004 and 2006, of which the male: female ratio...
being 135:87 (See Table 5: Statistics-Drug). From the male’s population 21% were aboriginal and 28% were aboriginal females (See Figure 2–Aboriginal and Gender-Drug). Based on daily average costs the total expenses for drug addiction admissions was $4,180,876.00 (See Table 6-Expenses-Drug).

Glossary
LOS – Length of stay in hospital
MRDx – Most Responsible Diagnosis
Definition: The one diagnosis or condition which is the most responsible for a patients stay in hospital.

Type 1 – Pre-Admit Comorbidity
Definition: A condition that exists before admission which affects the patients’ length of stay in hospital.

Type 3 – Secondary Diagnosis
Definition: Describes supplemental information for conditions a patient suffers which do not affect the patients’ length of stay.

Reference

ALCOHOL
Coded Admissions:
365 (2004-2005)
358 (2005-2006)
Total Admissions Coded: 723

Highest Number of Inpatient Admissions:
5 (2004-2005)
7 (2005-2006)

Lowest Number of Inpatient Admissions:
1 (2004-2005)
1 (2005-2006)

Table 1: Admissions — Alcohol

Alcohol Statistics from the Patients (Charts) Reviewed

Table 2: Statistics — Alcohol

Alcohol: (2004-2006)

Inpatients Admissions:
Total Inpatient Admissions: 723

Length of Stay in Hospital
Total LOS for MRDx: 857
Total LOS for Type 1 Dx: 2857
Total LOS for Type 3 Dx: 1899

Total Length of Stay: 5613
Average Length of Stay: 7.76 days

TOTAL EXPENSES FOR ALCOHOL = $5,770,164.00

Table 3: Expenses — Alcohol
DRUG
Coded Admissions:
222 (2004-2005)
225 (2005-2006)
Total Admissions Coded: 447

Highest Number of Inpatient Admissions:
6 (2004-2005)
4 (2005-2006)

Lowest Number of Inpatient Admissions:
1 (2004-2005)
1 (2005-2006)

Table 4 — Admissions — Drug
Drug Statistics from the Patients (Charts) Reviewed
Total Number of Admissions: 447

MALES VS FEMALES
Male Patients: 135 or 61%
Female Patients: 87 or 39%

NON ABORIGINAL
Male Non Aboriginal Patients:
28 out of 135 or 21%
Female Non Aboriginal Patients:
24 out of 87 or 28%
Total Aboriginal Patients:
52 out of 447 or 12%

Table 5: Statistics — Drug
Drugs: (2004-2006)
Inpatients Admissions
Total Inpatient Admissions: 447

Length of Stay in Hospital
Total LOS for MRDx: 540
Total LOS for Type 1 Dx: 2812
Total LOS for Type 3 Dx: 715
Average Length of Stay: 9.10 days

TOTAL EXPENSES FOR DRUGS = $4,180,876.00

Table 6: Expenses — Drug

DISCUSSION
According to the Canadian Addictions Survey, a report published in March 2005, 79% of Canadians over the age of 15 years were involved in drinking alcohol in the past year. The lowest numbers were in Prince Edward Island, which was 70%, and the highest was in Quebec, which was 82.3%. Approximately 44% had a drink at least once a week and approximately 10% had a drink four or more times a week.

Heavy drinking was described as five or more drinks at
a sitting for males, and four or more drinks at a sitting for females. 6% of all respondents drank once a week, and 25% once a month (1).

Low-risk drinking was described as no more than 14 drinks per week for males, and no more than nine drinks per week for females (2), and on any given day, no more than two drinks for males as well as females, 22% exceeded these guidelines.

The males always exceeded in drinking: 82% versus 77% had a drink; 55% versus 33% drank once a week; 23% versus 9% had five or more drinks at a sitting usually; 9% versus 3% had five or more drinks at a sitting on any given day in a week; and 30% versus 15% exceeded the low-risk guidelines.

Income, level of education, locales, and rural/non-rural areas were mentioned. There is no mention of financial burden to the taxpayers, nor is there any mention of how to tackle these problems at the National/Provincial/local levels, or how to reduce the burden in terms of early referrals to addiction counselors or community healthcare workers, or self-help groups.

“Hazardous drinking” behaviors were observed in 17% of current drinkers, out of which 25% were males and 9% were females. Drinking that caused harm to themselves or to others were 24%. Hazardous drinking is described as scoring 8+ on the Alcohol Use Disorders Identification Test (AUDIT), which consists of a 10-item questionnaire (including lack of control over one’s own drinking, failure to meet expectations, drinking in the morning, feelings of guilt, blackouts, injuries resulting from drinking, having someone express concern about drinking).(3).

In Canada, alcohol-related mortality in 2002 below the age of 69 was 1631, which consisted of 2.4% of all deaths in this age group. This translates into almost 43000 years of life lost prematurely. There were nearly 125,000 alcohol-related hospital admissions throughout Canada. (4).

The co-morbidities were psychiatric illnesses and illicit drug use. But cigarette smoking alone was approximately 85 %.(5)

An analysis of First Nation’s injury and poisoning mortality data in Saskatchewan from 1985 to 1987 showed that alcohol use was implicated in 92% of motor vehicle accidents, 46% of suicides in the 15-to-34 age group, 38% of homicide perpetrators, 50% of fire and drowning deaths, 80% of exposure deaths and 48% of deaths in the ‘other’ category.(6).

In 1996-1997, 46% of the people in detoxification and treatment centres in the Regina Health District were of First Nations or Metis decent (CCENDU 1998). According to the 1996 Census, First Nations and Metis people comprise approximately 11% of the Saskatchewan population. (7).

CONCLUSION
Our survey was undertaken to identify the financial burden in the Battleford’s area, which is within the Prairie North Health Region for the years 2004 through 2006 on a small sample of all patient’s admitted to Battlefords Union Hospital with diagnoses of alcohol and/or drug abuse. The survey took account the financial burden impacted by Aboriginal as well as Non-Aboriginal users in the area, and the data suggest heavy use of hospital beds in both groups, Aboriginal and Non-Aboriginal, Aboriginal being far greater given the population ratio.

This article is mainly about costs to taxpayers via the admission rates for alcohol and drug issues which would be an additional cost in that the beds they occupied could otherwise have been more effectively utilized elsewhere in the health care system.

It is imperative on the family physicians, not only in their clinics/offices, but most ideally in emergency rooms to ask the CAGE questionnaire, and those who fit the bill, should be referred to addiction counseling, and/or pharmacotherapy.

The pharmacotherapy could be any on of the drugs mentioned below:
1. Disulfiram (Antabuse)
2. Naltrexone (Opioid Receptor Antagonist)
3. Depot Naltrexone: available in USA.
5. Naltrexone in combination with Acamprosate. (COMBINE study did not show any evidence of naltrexone or acamprosate’s efficacy in preventing relapse) (8).
6. Off-label medications, which have been used in the United States of America are ondansetron (Zofran, which is a serotonin 5H3 receptor antagonist, and topiramate, an anticonvulsant

How can we as a healthcare group prevent or decrease the burden?
• Higher education encouraged?
• Lawful accessibility of drugs/alcohol?
• Raising the age limit to accessibility to licit substances
• Raising the taxes on licit drugs, for example alcohol?
• Tougher sentences by legal authorities?
• More therapeutic sentencing?
• More addiction counseling/reporting?
• Effect change in the cultural beliefs of Aboriginal / Non-Aboriginal groups?
• Continue with CBT, AA/NA brief motivational interventions, self-help groups, etc.?
• Would all these preventive measures save lives, and reduce the financial burden?

The opportunity is critical for physicians to engage problem drinkers especially since such contact is known to markedly increase treatment-seeking by these patients. (9).

REFERENCES

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