President’s Column

Welcome to the second edition of the CAPE CHRONICLE. As many of you know, I unveiled the first edition at last year’s annual scientific meeting in Vancouver. As I wrote at the time, it had been some time since we had a newsletter and I felt it was important to once again use this medium as a way of connecting our members together. I was personally very gratified by the positive response to the first newsletter. I was even more excited when our colleague, long-time CAPE member and good friend Dr. Gus Thompson expressed interest in taking on the role of Editor-in-Chief. As you will see in the pages of this edition, he began his new role with vigour, snapping photos and soliciting contributions from colleagues almost immediately (over soups and salad at the annual dinner, so the rumour goes). I have no doubt the newsletter is in the best possible hands.

Our meeting last Vancouver was a huge success. The scientific program was excellent, and I was truly impressed (as I know others were, too) by the high quality of the science. Dr. Jitender Sareen was the recipient of the Alexander Leighton Award and, as always, it was a great time for our membership to celebrate the achievements of the winner, while fondly recalling the life and contributions of the heart and soul of our organization, Alec.

I cannot believe it will only be a few months from now that we re-convene in Montreal, where I am sure the program will be equally impressive.

In addition to holding successful meetings, CAPE has also become an important contributing organization to the work of the Mental Health Commission of Canada. As with our involvement in the planning for the upcoming Canadian Community Health Survey on Mental Health, CAPE members are playing a central role on the planning committee for the Systems Performance Project. Organizations like Statistics Canada and the Commission recognize that connecting with CAPE provides unparalleled access to national expertise in psychiatric epidemiology and mental health services research. Although CAPE members have played, and will continue to play, important roles shaping research and mental health policy in Canada, I don’t know that we have truly thought through the role we play, or could play, in this regard. What other group can claim not only the best scientific minds in the field of mental health and addiction epidemiology, but representation from across the whole country? This discussion I would like to start at our up-coming meeting in Montreal.

So, with that, I turn the newsletter over to Gus! Let this begin a new chapter in communication and dissemination for our organization. Next up, the website and for that I would like to announce (stay tuned).

John Cairney
The 2012 Leighton Lecture: Advice from the incumbent

*Psychiatric Epidemiology- A Powerful and Economical Tool for Advancing Science and Policy: 10 Lessons over 10 years!*

Jitender Sareen MD
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I have found that psychiatric epidemiology is a powerful and economic tool for advancing the understanding of important public health issues. Below are 10 important lessons that I have learned over the last decade working in this field. I want to thank my mentors, mentees, patients and my family for all of their support!

1. **Ask important questions.**
   It is essential to ask important questions that are of interest to clinicians, policymakers and scientists. Although somewhat obvious, many researchers get so caught up in the details of the work that the big "So What?" question is not answered well. In our laboratory, we have used this approach to address many important questions. For example: Who is at risk for suicide? This is the most important negative outcome in psychiatry and we don't have a good understanding on how to prevent it. Another question that we studied was - does money buy happiness? With the economic recession and media reports of high profile suicides, we felt that it was an important issue to consider. A paper that addresses an important and timely question with a less rigorous design will still have a larger impact than a paper that addresses a less important question with more methodological rigor.

2. **Go into the Depths of Controversy.**
   We have found success in conducting empirical evaluations in areas where there is substantial and heated controversy. The hotter the issue, the more important it is to do an empirical investigation. For example, are anxiety disorders associated with an increased risk for suicide? No one will argue against the idea that depression, alcohol problems and schizophrenia increase the risk for suicide. However, although anxiety disorders are the most common disorders and are associated with suicide risk, many psychiatrists as well as policymakers do not include anxiety disorders in their discussion of suicide risk or interventions.

3. **Minimize Bias.**
   I want to thank Dr. David Streiner for simplifying thousands of pages of statistics textbooks with complicated formulas into 2 words. "Minimize Bias." Minimize does not mean NO bias. Bias, like transference, is ubiquitous. We all have our favourite assumptions. Although these assumptions/beliefs should clearly motivate you to do work in an area, when it comes down to conducting the experiment, it is important to be able to minimize the bias.

4. **Berkson’s Paradox/Selection Bias.**
   Berkson’s paradox or selection bias is a core principle to understand in conducting psychiatric epidemiology. Berkson’s statement is the following: "The result is that two independent events become conditionally dependent (negatively dependent) given that at least one of them occurs." It posits that
treatment-seeking samples (clinical or inpatient) are likely to produce spurious associations between risk factors and illness due to the nature of the sample. For example, in treatment-seeking samples, the association between anxiety disorders and alcohol abuse is much stronger than in the general population. Epidemiologic studies overcome this important selection bias associated with clinical samples.

5. Good studies answer one question and lead to 10 more.
Good studies can usually address one, possibly two questions in an area. In working on testing one hypothesis, often you need to understand the context and implications of your work. For example, we were conducting studies on the association between anxiety and depression disorders and risk for alcohol use disorders and found some papers that had shown a U-shaped relationship between alcohol use and mood and anxiety symptoms. In the general medical literature, the benefits of moderate use of alcohol on cardiovascular risk have been well-documented. This work led to a few follow-up papers on this issue.

6. Search for the truth, not the publication.
People, including me, get quite hung-up on finding a significant result for their main hypothesis. If the study is well done, and it blows an important well-accepted hypothesis out of the water, it is important to publish. The challenge is that if you don’t find an expected effect, you need to go back to check on the methods carefully. Don’t worry about non-significant results, aim to find the truth, even if it challenges your own assumptions. The greatest scientists had to swallow their pride and modify their theories based on sound empirical data.

7. Marry the primary research question to the strengths of the dataset.
In creating the highest quality research, aim to find the best epidemiologic dataset that has assessed your primary independent and dependent measures well. Often, you are not in control of what was measured in an epidemiologic study, and how it was measured. Thus, you have to be creative in fitting your question to the dataset.

8. Research is a team sport.
The days are gone when you could go into your lab (for me, that is a Starbucks Coffee shop) and do your analysis, write up your paper and submit it for publication as a single author. Most granting agencies are interested in knowledge translation and student mentorship. Thus, it is important to work together in a team to create synergy.

9. Psychiatric epidemiology is economical.
Many of the epidemiologic studies in Canada and around the world have cost million of dollars to conduct. However, analysis of these surveys usually is relative inexpensive (approximately $40,000) to do a secondary data-analysis study. Due to the large sample size of most surveys, usually, you will find a decent home for your manuscript.

10. Translational Epidemiology is the future.
Myrna Weissman wrote an excellent editorial describing the future of epidemiologic studies (Archives of General Psychiatry 2011). There has been a lot of emphasis on translational research from bench to bedside. Weissman suggests that we need to consider designs where we translate findings from epidemiology that can rapidly be tested in benchwork. She describes the classic example of the finding that smokers had increased risk of cancer in epidemiologic studies. These observations led to benchwork that showed toxicity of exposure to smoking to the lungs of animals.

This paper is an adaptation of the Alexander Leighton Lecture delivered by Dr. Sareen at the 2011 CAPE Conference.
It seems self-evident that those with a mental illness should receive the best services that can be devised. After all, mental illness is often severe, debilitating, recurrent, reducing life expectancy and a cause of great distress to the individuals and those closest to them.

Some fundamental requirements would seem to be that when hospitalization is required, that a bed is available. That necessary medications should be provided regardless of income, that income support should be adequate to maintain dignity and self-respect, that adequate safe housing should be available, that there should be assistance with finding suitable employment (or if not feasible, alternative occupational activities). Social and recreational activities should also be considered essential as should support for families and significant others. It should go without saying that there should be adequate caring clinical services offered by multidisciplinary teams to ensure that there is good psychiatric and general medical care both in the community and in the hospitals.

In 1952 only 11 general hospitals in Canada, all in larger centres, had psychiatric facilities. Since the 1960s, as in many other countries, there has been a shift away from large mental hospitals. A report, “More for the Mind” prepared for the Canadian Mental Health Association in 1963 focussed on moving services from mental hospitals to general hospital psychiatric units, maintaining what was called “medical integration.” This differed from
the US approach where new mental health facilities - community mental health centres - were established. A later Royal Commission in Canada strongly supported the view that there should be no distinction made between the care of the mentally and physically ill, and recommended moving those patients capable of receiving care in general hospitals from the mental hospitals as soon as possible.

The provinces embraced this move as it meant moving patients from provincially funded mental hospitals to general hospitals that were cost shared with the federal government. Thus, from 1960 to 1975 the number of beds in provincial psychiatric hospitals dropped from 50,000 to 15,000, and were replaced by 5000 beds in general hospital psychiatric units. This move, progressive in some sense, resulted in fewer beds and a decreased number of psychiatric patient days. From 1936 to 1961 the number of patient days per thousand population aged over 15 years stayed constant at just over 2000. By 1971 this was below 1300, and in 1988 dropped to about 730 where it remained for several years. By 2005 the count had dropped even further to 165 patient days per thousand population. The number of discharges for psychiatric patients in 1993/94 averaged 7.1/1000/year, and by 2005 had fallen to 6.1/1000/year.

By 1995 Canada had about 50 psychiatric beds/100,000 population. That was more than Denmark at 40, and less than the UK at 90, Sweden at 95 and the Netherlands at 175 (De Looper M, Bhatiak K 1998). Calculations of total numbers of beds can be misleading as different jurisdictions may classify beds - particularly for long-term care - into different groupings. Acute beds are easier to identify. Reviewing reports from several provinces in Canada the number of acute psychiatric beds varies from a high of about 30/100,000 to about 15/100,000. This compares to the London figure of 45.1 (Audini, Duffett, Lelliott, et al, 1999). In 2005/2006 in Canada there were 4,759,930 patient days for mental illness in both mental and general hospitals (58.8% in mental hospitals). The equivalent number of beds (assuming 100% occupancy) would be 7665 mental hospital beds and 5376 general hospital beds for a total of 13,041. This equates to about 38 beds/100,000. Australia claims to have a current bed ratio of 31/100,000.

Length of stay is a figure that healthcare administrators obsess about. In 2005/2006 the average length of stay for psychiatric patients in general hospitals was 16.4 days but the median was 8 days. In a psychiatric hospital the comparable figures were 99.5 days (median = 26 days). Apart from some crisis intervention and possibly medication stabilization in some cases, what can likely be achieved in an admission as short as 8 days? It is notable that the majority of general hospital admissions for patients with mental illness came through emergency departments (79%), whereas for other conditions only 55% were admitted that way. Obviously there are various interpretations that could be placed on this.

A CIHI report found that longer hospital stay for people with schizophrenia is associated with lower readmission. The rate in the 30 days following discharge averaged about 9% for all cases, but for those with schizophrenia the 30 day readmission rate was 12% jumping to 38% after one year. It seems hard to equate these numbers with successful community care.

These savings have been achieved at considerable cost to patients and their families, particularly those with a persistent mental illness. This proved to be a difficult population for the general hospital to adequately serve. There were inadequate provisions of housing, income support, inclusive community care (e.g. case management & assertive community treatment), and only sporadic efforts to involve consumers and families in service provision and planning. Continuity of care has often not occurred. Furthermore, services tend not to be well connected, and create barriers and obstacles to referrals between them. Many community services have been established with
short-term project funding, raising hopes and expectations only to have them dashed when the project funds cease.

In many instances there is little or no coordination between the services provided for substance use disorders (often not part of health care) and the services for the mentally ill. Thus, those with a mental illness and comorbid substance use often fall between the cracks.

Many of the chronic mentally ill in the community fail to get adequate general medical care (with a life expectancy reduced by about 20%), not because of funding issues, but because they are not case managed well enough to receive needed care. Assertive Community Treatment teams have now been established in many parts of the country, and, with some form of compulsory community treatment, are able to offer partial solutions.

A significant proportion of the homeless have mental illness, but despite some excellent local initiatives there is no coordinated national approach to this issue. The Mental Health Commission project of At Home/Chez Soi using the Housing First approach, offers signs of being able to partially resolve this problem. The idea being that once a person is given a place to live, he/she can then concentrate on other personal issues. Over 2000 homeless people are now participating across Canada in the study’s research component, believed to be the largest ever undertaken anywhere on homelessness and mental illness.

A final, but not lesser, matter is that as mental hospitals have been shrinking, jails have been expanding and that many mentally ill who commit minor offences are now being sent to jail rather than to psychiatric treatment.

In summary, there is little evidence that the chronic mentally ill are being well served by our poorly coordinated system of care that seems preoccupied with doing things at the lowest cost and operating at an inflexible 100% occupancy. We rushed too quickly to close mental hospitals (while not problem-free, they often provided a well run refuge for those with chronic mental illnesses). We failed to make adequate provision for community care, constantly lagging behind need, repeatedly developing patchwork and piecemeal solutions and programs, always waiting for the transfer of funding which never happened.

We need to rethink how and where those with the most severe unremitting illnesses can receive the most humane and comprehensive treatment and care (including occupational and income support and social programs) whether this be in the community, in supported living situations or in institutions. The push to have everyone live in the community seems to have been pursued to extremes, often to the detriment of those being helped.

We need to support research on the topic of the care and outcomes for those with chronic mental illness to guide policy and program development. Innovative programs should be evaluated and there should be good knowledge translation involving clinicians, administrators and policymakers.

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Attendees: 2011 Banquet

Important Conference Dates

CAPE 2012 - Annual Scientific Symposium
Thursday September 27th, 2012
Hôpital Louis-H. Lafontaine & Centre de Recherche Fernand-Seguin
7401 Hochelaga Î Montreal
Contact: Nancy Renaud
nrenaud.hlhl@ssss.gouv.qc.ca

IFPE 2013 - 14th International Congress
Leipzig, Germany -
June 5-8, 2013
Contact: Prof. Steffi Riedel-Heller
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