EPIDEMIOLOGY AND PUBLIC POLICY: THE ROLE OF THE INTERNATIONAL JOINT POLICY COMMITTEE OF THE SOCIETIES OF EPIDEMIOLOGY (IJPC-SE)

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CANADIAN SOCIETY FOR EPIDEMIOLOGY & BIOSTATISTICS (CSEB) BIENNIAL CONFERENCE

“PARADIGMS TO PRAGMATISM: EPIDEMIOLOGY AND BIOSTATISTICS FOR THE CHANGING WORLD”

JUNE 1-4, 2015
HILTON MEADOWVALE HOTEL, MISSISSAUGA, ON
ACKNOWLEDGMENT AND DISCLOSURE

As an IJPC-SE member society, the CSEB created space in the programme for this lunch workshop and waived the registration fee for both speakers.

Neither speaker has a financial conflict-of-interest to declare.
LUNCH WORKSHOP

• Story about the IJPC-SE
• Backgrounder: epidemiology and policy
• Influence, integrity and vigilance
• Small-group exercise, with a rapporteur for each group to permit discussion
IJPC-SE AND ITS MISSION:

• Volunteer-driven, not-for-profit consortium, currently comprising 19 national and international member-professional societies/associations

• Impartially generate, report and apply epidemiological methods to the formulation, implementation and evaluation of evidence for use in informing health policy
IJPC-SE GOAL & APPROACH

• Goal is to serve the public interest by informing health policy and related areas of endeavour through its work at the nexus of research and policy

• Coordinates inter-professional society activities that are related to research and practice in the generation of evidence, as well as in evidence-based policy application, formulation, implementation and evaluation

• Promotes epidemiological best practices to inform policy
IJPC-SE BRIEF HISTORY

• Formed in Seattle in 2006 at the 2nd North American Congress of Epidemiology

• It is now in its 9th year of operation
  1st Chair: Roberta Ness (2006 - 2007)
  2nd Chair: Susan Sacks (2008 - 2009)
  3rd Chair: Stanley H. Weiss (2010 - 2013)
  Chair-Elect: Wael Al-Delaimy (2016 - ?)

• Website, Founding Bylaws, related policy documents, and Not-for-Profit status set in motion in 2012-2015

• A major initiative was the launch in 2012 of its Position Statement on Asbestos
EPIDEMIOLOGY

(1) the study of the occurrence and distribution of health-related states or events in specified populations, including the study of the determinants influencing such states; and

(2) the application of this knowledge to control health problems

• Epidemiologists have become methodologists

• ‘Go-to’ people to design high-quality studies

• Traditional view: epidemiologists must conduct ‘objective’ research, publish the results, and leave policy to others
EVIDENCE-BASED PRACTICE

• Historically, medical decisions were based on expert opinion, clinical experience, and authoritarian judgment

• Research evidence (often poor quality until the latter part of 20th Century) was not an influential driver of medical practice

• Research did not have much influence on policy either
EVIDENCE-BASED PRACTICE

• Late 1960s – 1990s: development of evidence-based practice (EBP): use high-quality research to inform/guide clinical practice

• ‘Clinical’ epidemiologists became the leading practitioners of EBP

• EBP led to tremendous advances in research methods (studies had to be high quality to provide useful evidence)
POLICY

• 1990s – present: high cost of health care has prompted policy makers to mandate assessments of the evidence for treatment efficacy and effectiveness before reimbursing new therapies

• AB, ON, QC: leaders in evidence-based reimbursement decisions

• NICE in UK: evaluates new health technologies and makes reimbursement recommendations to NHS

• Public health: epidemiologic evidence is used to inform health policy
CELLPHONES AND DRIVING

Redelmeier and Tibshirani, NEJM, 1997:

• Case-crossover study of cellular telephone use (exposure) and motor vehicle accidents (outcome) in Toronto

• Odds of a motor vehicle accident were 4.6 times greater in persons who used cellular telephones while driving, compared to persons who did not use cellphones while driving
EVIDENCE THAT CONTRIBUTED TO THE BAN ON CELLPHONE USE WHILE DRIVING

<table>
<thead>
<tr>
<th>Hazard Interval</th>
<th>Control Period - Exposed</th>
<th>Control Period - Unexposed</th>
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<td>Hazard Interval – Exposed</td>
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<td>170</td>
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<tr>
<td>Hazard Interval - Unexposed</td>
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\text{OR}_{MP} = \frac{170}{37} = 4.6
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PART 2: WORKSHOP PRESENTATION

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Professor emeritus, University of Alberta, Canada
Adjunct Professor, University of Canberra, Australia
Chair, International Joint Policy Committee of the Societies of Epidemiology (IJPC-SE)
IN WHOSE BEST INTERESTS?

• Public interest vs any other interest(s)?
• In whose best interests do epidemiologists work? Is there any allowance for variation in this view?
• In whose best interest is research done? Is every research question framed to serve one interest or another?
• Whose interests are being served when research is funded by public funds?
• And, whose best interests are being served when research is funded by private/corporate dollars?
• Are both appropriate? Is there any moral tension in choosing a public over a private/corporate source of funds to address a particular scientific question?
PROFESSIONAL INTEGRITY / ETHICS / MORALITY / LAW:

- The defining influences in our behaviour / conduct as people ... and as research scientists ... in the social context in which we live, work and play
HUMAN AND SYSTEM FRAILTIES

• Junk science: Our professional obligation to be vigilant and especially careful in peer review

• Need for oversight (as in Human Research Ethics Boards/IRBs)

• The need to keep ourselves on track with ETHICS GUIDELINES and related activities
RELENTLESS PRESSURE FROM VESTED INTERESTS

• Manoeuver their way onto review panels, influence Boards of our professional associations, and infiltrate the literature with junk science

• Expert witness tensions arise between the plaintiff and defence sides of the argument in tort actions where the rubber hits the road concerning policy decisions

• David vs Goliath?

• Current major initiative of the IJPC-SE is its Working Group on Conflict-of-Interest and Disclosure
ONE FORCE INFLUENCING ACADEMIC PERFORMANCE

Differing Journal policies exist on the mention of policy-related implications of any research paper’s findings

A TENSION ARISES BETWEEN THE NEED, ON THE ONE HAND, FOR ARMS-LENGTH SCHOLARLY ENDEAVOUR AND, ON THE OTHER HAND, THE NEED FOR COMMUNITY ENGAGEMENT
WORKSHOP EXERCISE AND ITS CONTEXT

• In small groups, consider the scenario in which you are working as an associate professor of epidemiology in a highly-regarded Canadian university.

• Your recent promotion to associate professor was based on your contribution as a research scientist to better explicating the relationship between exposure X and disease Y (and now for which you are a recognized expert), to your good teaching record, and to your professional service on both University-wide and community committees/advisory boards.
WORKSHOP EXERCISE: THE CHALLENGE/OFFER

• You are approached by a law firm to accept a 3-year contract in the form of a retainer. The law firm usually works in support of corporate interests against people claiming harm from their products. The lawyers want you to conduct, for a large amount of money that will be paid to your university for your use in research, a large study to further explore the relationship between “exposure X” and “disease Y”

• The law firm requires that: (a) your study design must exclude certain categories of exposed people; and (b) the law firm will have a veto right over your final paper for publication
WORKSHOP EXERCISE: YOUR APPROACH TO A DECISION

• Do you accept the contract, or not?

• What is your rationale for either decision?

• What protections do you assume should be in place?

• Other?
WORKSHOP EXERCISE: OVERVIEW

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Do you accept the contract, or not? What is your rationale for either decision? What protections do you assume should be in place? Other?
THANK YOU FOR CONTRIBUTING TO OUR COLLECTIVE WORKSHOP EXPERIENCE!

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