

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

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*"PARADIGMS TO PRAGMATISM: EPIDEMIOLOGY AND  
BIostatISTICS FOR THE CHANGING WORLD"*

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# 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 2<sup>nd</sup> North American Congress of Epidemiology
- It is now in its 9<sup>th</sup> year of operation
  - 1<sup>st</sup> Chair: Roberta Ness (2006 - 2007)
  - 2<sup>nd</sup> Chair: Susan Sacks (2008 - 2009)
  - 3<sup>rd</sup> Chair: Stanley H. Weiss (2010 - 2013)
  - 4<sup>th</sup> Chair: Colin L. Soskolne (2014 - 2015)
  - 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

	Control Period - Exposed	Control Period - Unexposed
Hazard Interval – Exposed	13	170
Hazard Interval - Unexposed	37	479

$$OR_{MP} = 170/37 = 4.6$$

# PART 2: WORKSHOP PRESENTATION

**Colin L. Soskolne, PhD**

**[www.colinsoskolne.com](http://www.colinsoskolne.com)**

**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

- Manoeuvre 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

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.

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 final veto right over your final paper for publication.

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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