Pain and Prejudice

What Science Can Learn about Work from the People Who Do It

KAREN MESSING
Why did I write it?

- Trying to make sense of my 35 years of research in OSH
- Exploring my own malaise as a highly-paid worker studying lower-paid workers and what that means for my own understanding of occupational health
What is the book about?

- Part 1. Studies of workers
  - Chapter 1. Factory workers
  - Chapter 2. Invisible cleaners
  - Chapter 3. Standing still (service workers)
  - Chapter 4. Brains of low-paid workers
  - Chapter 5. Teamwork
  - Chapter 6. Home invasion
  - Chapter 7. Teachers
What is the book about?

Part 2. Science and workers

- (Chapter 8. Becoming a scientist)
- Chapter 9. Pain and prejudice
- Chapter 10. A statistician’s toes
- Chapter 11. Where I try to give a happy ending to an unhappy story, at the request of the publisher - about partnership research
The message of the book

- It is hard for people who are not low-paid workers to see, hear or understand what their work is like or what effects it has.
- Scientists are not low-paid workers.
- For scientists to understand occupational health, it helps if there is a context that forces us to observe, listen and understand.
- Partnership research can provide that context.
Partnership

- 1976: University of Québec (Montréal) and the 3 major trade union confederations agree on research and training collaboration.

- 1993: Agreement between CINBIOSE research center and the unions on research on women’s occupational health.
Chapter 1. Genetics and a factory, 1978

- Workers learn they are exposed to radioactive slag
- Scientists want nothing to do with the problem
- But UQAM has an agreement with the CSN union....
Results

- I am a fungal geneticist but try to help
- We find some indications of gene damage
- The company installs new ventilation on the condition the union withdraw from the study.
- The company closes its doors in 1992; workers will never know whether their children’s health was affected
...Chapter 3.
Prolonged standing

- Nicole Vézina is asked to study
  Cashiers: Can they work sitting?
- They sit in almost all other countries
- She wins her case in 1989, but the workers are still standing
Results (science)

- Despite many studies, science still worries primarily about prolonged sitting.
- In North America, 45% of workers work standing more than three-quarters of the time; only 13% of them can sit at will.

Archives of Environmental & Occupational Health

Reducing Sitting Time: The New Workplace Health Priority

Ronald Plotnikoff and Nandini Karunamuni

- University of Newcastle, Callaghan, New South Wales, Australia
- University of Alberta, Edmonton, Canada
Technical issues

1. Studies of sitting often compare it with “standing” without examining the standing posture more closely
What is standing?

- Walking
- Static standing
- Leaning
- Crouching
- Stretching
- Carrying
- Bending...
2. Adjusting for gender

- Women who stand are more likely to be static; men move around more at work
- Adjusting for gender without measuring static standing (very hard to do) can mean underestimating the effects of static standing
- Mixing standing and walking can make standing look better
3. The notion of constraint can be important, since workers who are free to vary their working posture can protect themselves.

- Many studies don’t distinguish between constrained and unconstrained standing (or occupational and non-occupational postures), which can also underestimate effects of constrained static standing.
…Chapter 6. Home invasion
Schedule of a telephone operator with 15 years’ seniority, mother of children under 13

Hours posted Thursday
Chapter 6. Home Invasion

- Service-sector schedules are increasingly generated by computers in 15-min segments, closely related to sales data.
- The resulting schedules are highly variable, extended, unpredictable.
- Telephone operators, retail sales staff, industrial cleaners (FTQ) ask us for studies.
Results

- Some full time regular jobs were created
- Employer said our study didn’t have the “wow” factor and did not go on
- Worker says: I need to work more hours (for the family income) but I can’t work more hours (because of family needs)
- Scientist says: She should get another job
- Most work-family studies are on highly-paid workers
Donna Mergler and I founded CINBIOSE in 1985-90 to do research on prevention in partnership with unions.

80s and 90s: Several funding avenues opened up for community partnership.

We get lots of money from 5 federal and provincial partnership programs.

These programs have all ended.
Chapter 9. Pain and prejudice

- Workers report pain
- Some scientists believe them. Michel Vézina, Lippel, Stock et al. develop EQCOTESST to measure pain, show under-reporting
- Other scientists develop a theory of catastrophizing
Results

- The EQCOTESST study, despite peer review at many levels, was denounced by employer groups as unscientific and is downplayed by its funder. Studies of catastrophizing receive a lot of scientific interest, no public criticism.

EQCOTESST is defended by the CSN and CSQ unions.
Chapter 10.
A statistician’s toes

- Workers associate their pain with their work
- Scientists require certainty at 0.05 and sometimes 0.01, based on Fisher’s toes
- I realize the injustice of this in Peru in 2012, during a bike trip
These women and their compatriots paid for Pierre’s shots because he had about 1 chance in 1000 of dying from rabies.

Canadian workers must have a much greater probability of damage ($\alpha < 0.05$) before their work-related problems will be recognized and compensated.
Supportive structures have been critical to maintaining our relationships with workers and enabling us to listen

This has been good for our science: new questions, critical eyes

Union women’s committees, health and safety committees and community groups have also found our work helpful and have supported us
But austerity is affecting occupational health and research
With many other progressive scientists, we have sometimes been successful in helping workers, in changing laws and practices, in helping science evolve.

Can this continue?
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Paperback available from the usual sources