

Translating Research Findings into Practice:  
Lessons from Successes and Failures

*Mainly Failures*

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**Bridging the gap between research and practice**

# Bridging the gap between research and practice



November 7, 1940 - Tacoma Narrows Bridge

# Presentation

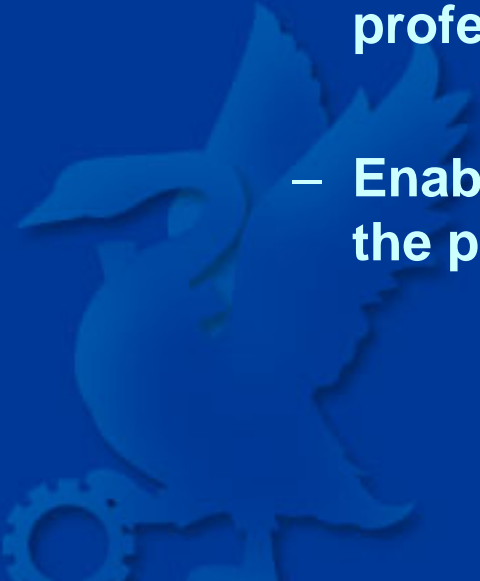
**Why the bridges between research, practice and policy are not built and why, if they are built, they sometimes collapse**

- **My personal research experiences**
- **What others think**



# My first success

- **My first gerontology study (1979-1982)**
- **Family care of people with dementia**
  - MRC Medical Sociology Unit – Aberdeen
  - Finding- Carers were very stressed, needed a break from caring and valued support from health care professionals.
  - Enabled Community Psychiatric Nurses to increase the provision of respite care.



## Note

- An example of professionals using ‘selected’ research findings to support what their practices.

*Hence, it can hardly be called a success.*



# Unintended Success

## DNA (Do Not Attend) Study



- Non-attendance at hospital outpatient clinics

Crosshouse  
Hospital, Ayr

## Failure to bridge the gap

### Q. Where do we lay the blame?

#### 7 Barriers (Sussman et al 2006)

1. Much research is conducted for its own sake, to understand a unique area of intellectual study
2. Formal clinical practice guidelines have not been composed with sufficient care such that translation is possible.
3. There is competition among programme alternatives.
4. Although adopting evidence-based programs is cost-effective, many will perceive efforts to follow a programme development model as lengthy and expensive.
5. It takes a great deal of time to nurture researchers to communicate with each other across fields and come to share similar conceptual schemes.
6. Practitioners may not be aware of or sufficiently familiar with an innovation to utilize it.
7. Researchers neglect to interpret their research findings in ways amenable to dissemination.



- 4 out of 7 of these ‘barriers’  
blame **researchers**.



*This is outrageous!*



# UK

**Dunn, Crichton, Roe and Seers (1998)**  
*Journal of Advanced Nursing, 27, 1203-1210*

## Nursing

- **Factor 1 – The nurse**
  - the characteristics of the adopter;
  - the nurse's research values, skills and awareness (N)
- **Factor 2 – Setting**
  - characteristics of the organization;
  - setting barriers and limitations (S)
- **Factor 3 – Research**
  - characteristics of the innovation;
  - qualities of the research (R)
- **Factor 4 – Presentation**
  - characteristics of the communication;
  - presentation and accessibility of the research (P)

# System Failures and Organizational Barriers

1. **University priorities**
2. **Funding body priorities**
3. **Accepted designs for 'scientific' research**
4. **Lack of involvement of older people**
5. **Political hostility to research findings**
6. **Reliability and uncertainty of interpretation**

# 1. Universities are to blame

- Translating findings into practice is not valued by UK universities

*Why?*



# UK Research Assessment Exercise (RAE)

- 4 publications in top international journals
- Grants from funding councils

*No 'credit' for translating  
research findings into practice*



# Research Assessment Exercise



**Prof Ray Jones,  
University of Glasgow  
(now University of Plymouth)**

**Development of “Health Point”  
– a touch screen kiosk**

## Before RAE

Research project taken through to commercialisation and implementation



Health Point



## 2. Research funding councils are to blame

- If one were to build in time to implement findings, grants would be so expensive that they would never be funded.
  - Research councils behave as though they want implementation to be done for ‘free’.
- Funding councils are not prepared to fund implementation as part of a grant because the research might not lead to findings that are statistically significant, meaningful or **POLITICALLY ACCEPTABLE**

### 3. Most research design prevents translating findings into practice

- Designs that might hugely increase the chances of getting research findings into practice:
  - Action Research
  - Appreciative Enquiry

#### **Key to Success:**

Policy makers and practitioners are directly involved

*On the whole, these designs are not regarded as scientifically credible.*

## 4. Non-involvement of older people is to blame

Q. Is this really the solution?

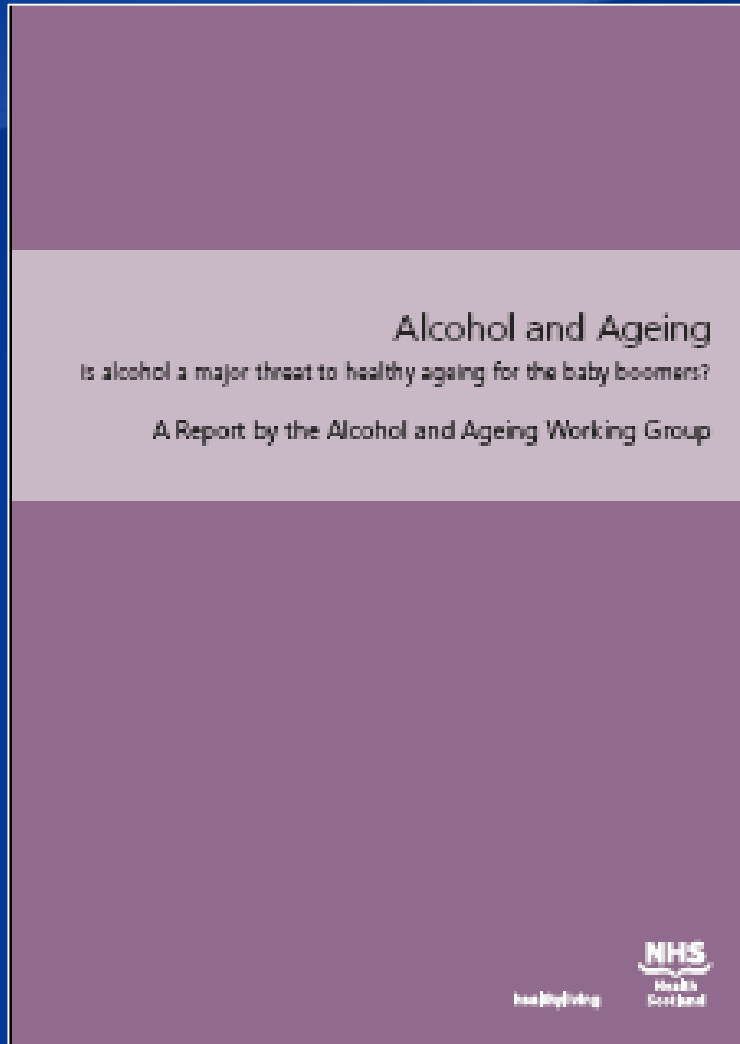
Q. Is there any evidence that involving older people increases the likelihood of findings influencing practice?



# *Follow up the research with a protest*



## 5. Political hostility is to blame



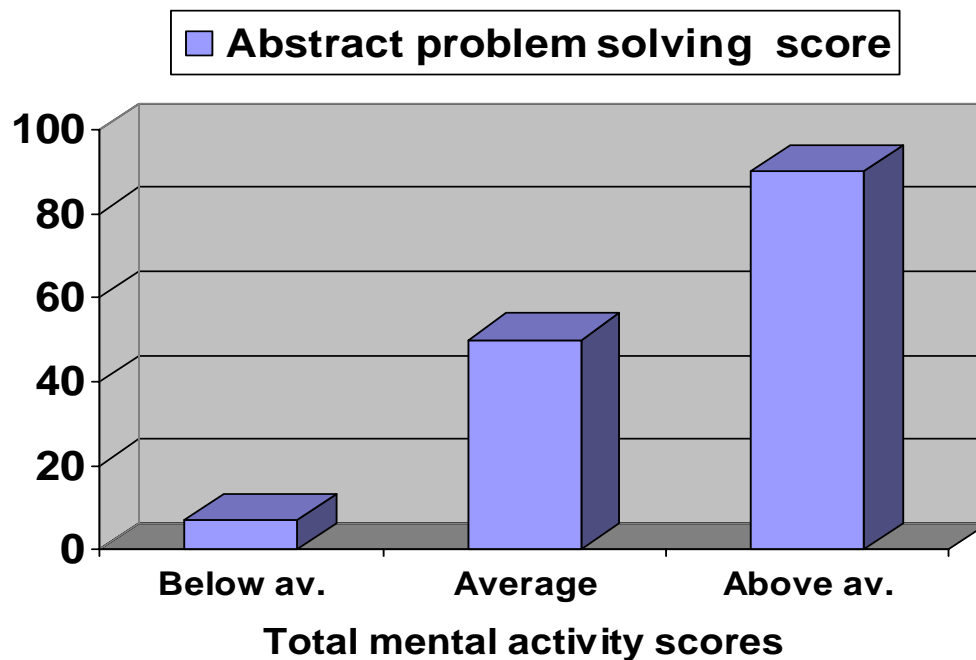
### One of my projects:

- Recommendation that the price of alcohol must go up was ‘controversial’.
- We are asked to remove it
- We refused
- The report could not come out as an ‘official’ report
  - Meaning that it did not come to the attention of policy makers or even other researchers.
  - Few copies were printed and distributed
    - Mainly available on the web (though hard to find)

## 6. Uncertainty about findings is to blame

- Evidence is often correlational, hence we cannot be sure of cause and effect.





**Figure 1. – Relation between reported mental activity and cognitive functioning amongst old people.**

# Cause or effect?

- I don't know
- I cannot guarantee that if older people engage in mentally stimulating activities they will not experience cognitive failure or dementia.
- *Though the media often try to make me say this.*
- My view is that these activities will not harm you, they are fun, so it might be worthwhile....just in case they prevent dementia



- **Strong correlation between religion and health in old age**

*Q. Should governments promote religion as part of national health promotion policies?*

# Current emphasis on translation or implementation of research

Q. Has there been a big change since my early success?



*Unfortunately, it is still the case that*

**Research is driven by policy**

*rather than*

**policy driven by research**



**Sussman et al, 2006\***

*“The reasons for this protracted gap between research findings and the implementation of evidence-based strategies and practices are complex and still poorly understood.”*

*\* Evaluation and the Health Professions, vol 29, No. 1, March 2006, 7-32.*

# Conclusions

- ✓ We need more research on how best to implement research findings
- ✓ We need to be patient



## Sussman et al 2006

*“At present, it may take as long as one or two decades for original research to be translated into routine medical practice”*

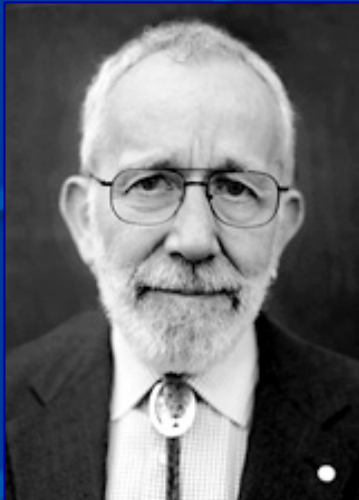
\* Sussman et al, (2006) *Evaluation and the Health Professions*, vol 29, No. 1, March 2006, 7-32.

# Good example of the difficulties researchers have in moving away from an established approach:



## Stomach Ulcers (*helicobacter pylori*)

- Barry Marshall and Robin Warren, two Australian scientists, were awarded the Nobel Prize for Medicine for their discovery that a bacteria can trigger stomach ulcers in 2005
- Marshall and Warren had a huge battle to get recognition for their new theory.
- At one point in their research Dr Marshall deliberately infected himself with the bacterium to show that the H.pylori caused stomach and duodenal ulcers.



**First paper showing that ulcers were  
caused by a bacterium was published in**

**1895**





**Let's, however, end on a note of optimism**



Some bridges become a bit wobbly, but not all fall down.

*Thank You*

Mary Gilhooly

