New Frontiers: Futures for OHS

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By
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OHS as a discipline is not fit for the 21st century. It is isolated and has a poor academic base, a limited remit, uneven provision, lack of good quality data, a poor image and is the servant of the employer.

Dame Carol Black, Ferguson-Glass Oration, March 21, 2010
SAFETY IN ACTION CONFERENCE 2011

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Futures studies definition

“The systematic study of possible, probable and preferable futures including the world views and myths that underlie each future”

Sohail Inayatullah, 2002
Futures studies rationale

“...most decision makers at all levels simply want information that can justify their pre-understandings of past, present and future....”

Sohail Inayatullah, 1990
Causal Layered Analysis

Litany
Quantitative trends, lists of reported ‘facts’

Systemic"
Structures and systems which generate the above –

World View
Culture, politics, worldview

Metaphor
Deeply held archetypes and myths

Increase leverage
New claims and claimants in Vic 1986 to 2008

Source: ISCRR, CRD, 2011
Figure 4.5 Integration of HSMS into the operational system

1. Policies, objectives, accountabilities, and review
2. System structure and planning
3. Customer orders, contracts, and tenders
4. Design and development
5. Document and data control
6. Purchasing
7. Customer supplied product
8. Product identification and traceability
9. Process and operational control
10. Inspection and testing
11. Calibration
12. Inspection and test status
13. Reporting of complaints, deficiencies, and non-conformances
14. Corrective action and continuous improvement
15. Storage, handling, packaging, and transport
16. Records management
17. Internal management system auditing
18. Training
19. Servicing
20. Data collection and statistical
21. Sales, marketing, and advertising
22. Finance and administration
23. Identification of statutory requirements
24. Community awareness and routine reporting
25. Plant identification and registration
26. Plant modification management
27. Risk analysis and assessment
28. Incident reporting and investigation
29. Emergency preparedness and response

Source: G. Dell, R. Gardiner 1998

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Diagrammatic representation of methodology of futures initiative
Annotated Bibliography
Institute for Safety, Compensation and Recovery Research
27 October 2010

Safety metaphors and theories 19th and 20th centuries

- Modern safety theory arose in beginning of 20th century – „the second industrial revolution“
- The Safety First Movement, 1906, US Steel: individual hypothesis
- Pittsburgh survey, 1906-07 – sociological survey of working and living conditions of workers in Allegheny: environmental hypothesis

Study published in 2009 found that employers tended to have a view that OHS was a matter of managing individual safety behaviours.

Follow up study presented at a conference in February 2011 reported regulators had a view that OHS was an organisational-wide matter for which managers were responsible.

Model which describes relationship between responsive dialogue, participative structures, employer attitudes, safe practice routines and safety self-management

For negative safety cultures draws a distinction between “disregard for safety” and “dismissive defiance”

Professor Valerie Braithwaite, Ninth National OHS Regulatory Research Colloquium, Feb 2011
DEEP WATER

The Gulf Oil Disaster and the Future of Offshore Drilling

Report to the President
National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling

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Findings on BP Deepwater Horizon Oil Spill

- Could have been prevented
- Immediate causes identifiable
- Process was at frontiers of experience, neither industry or government prepared for risks
- Reform of regulatory oversight needed to ensure autonomy and technical expertise
- Regulatory oversight not sufficient, need self-policing
- Government must close gap, and industry must support rather than resist
- Scientific knowledge inadequate

Source: National Commission on the BP Deepwater Horizon Oil Spill etc, Jan 2011
Robert Owen (1771-1858)
A parental philanthropist

- In the first industrial revolution the environmental hypothesis prevailed
- Is the basis for modern-day CSR
Workers fined $115,000 over bullying of cafe waitress

Steve Butcher
February 9, 2010

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Four men responsible for the relentless bullying of a teenage cafe waitress were sentenced over the bullying of a waitress who later killed herself are 'cowards', say her parents.

Cafe bullies' walk of shame
Four cafe workers sentenced over the bullying of a waitress who later killed herself are 'cowards', say her parents.
New claims and claimants in Vic 1986 to 2008

Source: ISCRR, CRD, 2011
MSD and Mental disease claims vs Injuries

Source: ISCRR, CRD, 2011
Incapacity days

Source: ISCRR, CRD, 2011
Traditional OHS Model

HEALTH GAINS

HEALTH PROMOTION
Promote health and well-being

HEALTH PROTECTION
Prevent harm

WORK-RELATED RISK

Non work-related risk

ORGANISATIONAL GAINS

Improvements to productivity

REDUCE LOSSES

Health promotion in the workplace

Promote health and well-being

Prevent harm

Physical environment

Psycho-social environment

Work-related risk

Non work-related risk

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WHO Definition

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity

International Health Conference, New York, 19-22 June, 194
Health protection is reducing the impact of infectious diseases, chemicals, poisons and radiation.
Health promotion generates living and working conditions that are safe, stimulating, satisfying and enjoyable.
Healthy hair cells in a human ear

The hair cells are severely damaged or missing altogether

The hearing loss associated with this type of damage is called Sensorineural and is often associated with excessive noise exposure.
Breast cancer cells. A cluster of breast cancer cells showing visual evidence of programmed cell death (apoptosis).

Source: http://www.cancerandcommunication.at/cc/modules/welcome/index.php?id=1:1
Traditional OHS Model

HEALTH GAINS
- HEALTH PROMOTION
  Promote health and well-being

ORGANISATIONAL GAINS
- Improvements to productivity

HEALTH PROTECTION
- Prevent harm

OHS

- Health promotion in the workplace

WORK-RELATED RISK
- Physical environment
- Psycho-social environment

NON WORK-RELATED RISK
- Individual

HEALTH PROMOTION
- Promote health and well-being

HEALTH PROTECTION
- Prevent harm

ORGANISATIONAL GAINS
- Improvements to productivity

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Integrated approach to workplace health and safety

- **HEALTH GAINS**
  - **HEALTH PROMOTION:**
    - Organisational Health and Safety Management
  - **HEALTH PROTECTION:**

- **ORGANISATIONAL GAINS**

- **SOCIAL CAPITAL GAINS**
  - **IMPROVEMENTS TO PRODUCTIVITY**
  - **REDUCED LOSSES**
  - **REDUCED SOCIAL ISOLATION**

**HEALTH PROMOTION:**
- Organisational Health and Safety Management

**HEALTH PROTECTION:**
- Physical environment
- Organisation social environment
- Family and community

**HEALTH GAINS**
- Reduced health isolation
- Organisational health and safety management

**SOCIAL CAPITAL GAINS**
- Improved social isolation
- Organisational health and safety management

**ORGANISATIONAL GAINS**
- Improved productivity
- Reduced losses

**IMPROVEMENTS TO PRODUCTIVITY**
- Reduced social isolation
- Organisational health and safety management

**REDUCED LOSSES**
- Improved health protection
- Organisational health and safety management

**REDUCED SOCIAL ISOLATION**
- Improved health promotion
- Organisational health and safety management
Business leaders for reasons of productivity

“At a higher level for businesses there’s cost control, almost every business that I know of in the UK will tell you that mental health stress, mental illness is the commonest cause of absence that they face.

Now if you choose to do nothing about your commonest cause of sickness absence then I would suggest you are not managing your business very well.”

- Paul Litchfield, BT
Public health for reasons of population health and equity
Failure to progress; the contraction of the midwifery profession by Rosemary Mander and Valerie Flemming
Failure to progress: the contraction of the midwifery profession

**Strengths**
- Professional status, RCM
- Improved safety of birth

**Weaknesses**
- Medicalisation
- Inactive when role eroded

**Opportunities**
- Government policy on health reform
- Research-based approach
- Higher education? – retain supervisory tradition

**Threats**
- Health care personnel
Futures study methodology

“The image of a new future, while emergent, is pulled down by the weight of an industrial era.”

Sohail Inayatullah, 2008
The story so far …….

- Underlying metaphor in OHS for many employers is support for individual hypothesis.
- Need to understand worldviews better, and how they vary.
- Safety is a relatively new concept associated with the second industrial revolution, it replaced paternalistic philanthropy, an environmental hypothesis, the basis of occupational health and modern-day CSR.
- Chronic illnesses are the pressing problems of today.
- Traditional harm minimisation (safety) model is not sufficient.
Variables selected for double variable scenarios

- Prevention: compensation
- Universal coverage: work/road injury coverage
- Public influence: science/evidence
- Independent authority/regulation and control: community society collaboration
- Boom: bust
- Market drivers: social drivers
New frontiers for OHS

1. Upstreamed and integrated
2. New partnerships
3. Development of new employer/worker compact is an opportunity to demedicalise
4. Use of foresight techniques to identify emerging risks
5. Use of implementation science and systems research to drive effective interventions at community level
Evidence based model for integrated OHS

Source: NIH and CDC workshop, 2010, Am J PH

Intervention targets for worker health and well-being

Work Environment:
Physical, Organizational and Psycho-social

Work-Family-Community Interface

Individual Health-Related Behaviors

Economic

Legal

Political

Social

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Model for mental health promotion

The Canadian Mental Health Association, 2010
Case study – WellWorks

- Cancer prevention
- 24 work sites in Massachusetts
- Divided into 12 matched pairs: intervention site and control site
- Intervention site received integrated HP/OHS program
- Control site received HP program
- Outcome factors: smoking cessation and diet (fibre, fat, fruit and veg)
Case study – WellWorks

**Control group (HP)**
- Smoke free policies
- Healthful eating policies
- Health education programs

**Intervention group (OHS/HP)**
- Smoke free policies
- Healthful eating policies
- Health education programs
- Occupational risk identification, assessment and control led by industrial hygienist
Case study – WellWorks

Health outcomes (after 2 years)

- Fat consumption significantly less in OHS/HP group
- Fibre consumption for skilled and unskilled labourers greater in OHS/HP group
- Fruit and vegetable consumption greater in OHS/HP group
- Smoking cessation twice as likely in OHS/HP group
Case study – WellWorks

Process evaluation:

★ Awareness and participation higher in OHS/HP group compared to HP group
Case study – WellWorks

Possible reasons for greater effect of OHS/HP combined:

- Perception that OHS risks greater threat to health
- Awareness of OHS risks may raise sense of vulnerability
- Addressing OHS risks may give program credibility
- Workers see HP programs alone as futile, but if OHS risks addressed more likely to do their bit too
- OHS interventions require more management engagement – management concern may mitigate fatalism
- Management engagement on OHS may aid HP

New partnerships

**Boom**
- Differentiate employers
- Social agenda dominates
- Co-ordination globally and cross government
- Science and technology
- Competition for workforce
- Businesses add value
- New partners, local
- Greater transparency
- Businesses share knowledge
- Market driven

**Government-led**
- Services rationed – inequity
- Downstream/upstream
- Business agenda dominates

**Partnership-led**
- Innovation

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Drivers for futures in employment relationship, Wong 2010

**Expert opinion**
- ICT
- Globalisation
- Variable growth
- Inequality
- Education and skills
- Environment
- Role of the state

**Literature**
- Employee health
- Population growth
- Migration
- Demographic change
- Rise of the knowledge economy
- New business models
- Flexible working
- Low control/high trust
Re-negotiating the employer: worker compact is an opportunity to de-medicalise

The war for talent - Power and status is aligned with an individual’s market value not role

Organisations will move away from their current focus on generational diversity and Generation Y, to managing life stage diversity

Flexible and remote ways of working will pose significant challenges to leadership, virtual team dynamics, and remote people management

Employee engagement thinking should mature – focus on attitudes and values,

Relentless change, increasing inequalities in society and the workplace, widening pay differentials, and limited social mobility may create more opportunities for workplace conflict

Productivity will be key, managers will have to allow greater autonomy

Source: Future challenges in relation to the employment relationship, Wong, 2010
Emerging risks

1. Deteriorating employment relationship
2. Changing demographics of the workforce
3. Sustainability and green chemistry
4. Emerging risks and the need for new ways to assess and manage risk
5. Injury prevention and injury compensation
6. Sustainable governmental occupational safety and health system
7. Global engagement and governance

Source: John Howard, Head of NIOSH, 2010
Implementation science

Health system building blocks

LEADERSHIP/GOVERNANCE

SERVICE DELIVERY

HUMAN RESOURCES

INFORMATION

FINANCING

MEDICAL PRODUCTS, VACCINES AND TECHNOLOGIES

Overall goals / Outcomes

+/- Accountability

+ Trust
+ Decentralization

+ ACCESS

+/- COVERAGE

+/- UTILIZATION

+/- HEALTH
(level and equity)

+/- EFFICIENCY
& COST EFFECTIVENESS

+/- RESPONSIVENESS

+/- MOTIVATION

+ Availability of supplies

+/- Retention rural areas

+ CASE MANAGEMENT
+/- Perception of services

+/- QUALITY

Source: Systems Thinking, WHO, 2009
Conclusion

1. Workplace health promotion is on the mainstream agenda for reasons of health, well-being and productivity
2. Traditional OHS model is not fit for this purpose
3. Deeply held beliefs on individual vs environmental hypotheses need to be better understood
4. Future directions likely to include:
   - Integrated models with voluntary and regulated components with a greater focus on prevention
   - New partnerships, including different relationships between business and government
   - New compact for workplace relations is an opportunity to de-medicalise
   - Use of foresight techniques for identifying emerging risks
   - Use of implementation science and systems research to improve the effectiveness and efficiency of OHS interventions