

Clinical Judgement in Modern Healthcare

SVENSKT FORUM FÖR
INTEGRATIV MEDICIN

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Royal College of Physicians: Defintion (2005) of Medical Professionalism

"Medicine is a vocation in which a doctor's
knowledge, clinical skills, and judgement are
put in the service of protecting and restoring
human well-being."

**Key defining feature of medical
professionalism: *Clinical Judgement***

Royal College of Physicians:
Doctors in Society. Medical professionalism in a changing world.
Report of a Working Party of the Royal College of Physicians of
London: RCP 2005

Clinical Judgement

- Core competence in health care
"Clinical judgement is at the heart of practice" Kenny
1996
Physicians' excellence and expertise is manifested
by excellent clinical judgement.
- Develops through practice, experience,
knowledge and reasoning
- Extends in all areas: diagnosis, treatment,
communication, decision-making
- Growing amount of high esteem and research
- Mainly in diagnosis, and decision-making, not in
therapy assessment

Clinical Judgement and Therapy Assessment

In 20th Century Positivism

Clinical Judgement in Positivism

- Clinical Judgement is intuitive,
low quality correlational statistics
- *Post hoc, ergo propter hoc*
- Generally flawed and biased
- Clinical trials shall „guard against any
use of judgement“ *Pocock 1991*
- Clinical expertise only to match patients
diagnosis and preference with „best
evidence study“

The Central Question of all Therapy Assessment

How can cause-effect relationships
between therapeutic intervention and
clinical outcome be recognised?

Classic Answer

Through a
Randomised Controlled Trial
(RCT)

Why?

Conventional Methodology 4 Paradigms

Key epistemologic/philosophic paradigms
for assessment of causal relationship

- Experiment - Fr. Bacon 17th century
- Repeated Observation - D. Hume 18th century
- Comparison - J. St. Mill 19th century
- Randomisation - R. Fisher 20th century

Transferred to Clinical Research

Assessing cause-effect relationship
(efficacy) needs

trial

cohort-trial

comparative cohort-trial

randomised comparative cohort-trial

= RCT

⇒ Most compelling evidence is provided by the
double blinded randomized controlled trial

Central Paradigm / Dogma:

David Hume:

Causality assessment in single cases
not possible

Transferred to Clinical Practice

- Individual physicians/nurses judging therapy effect in individual patients:
Self-Delusion !
- Experience and expertise:
Self-Delusion !

**Professionalism
Clinical Judgement
Positivism**

Technical Rationality: Positivist Epistemology of Practice

- Prevailing model of professionalism
- Intelligent practice is an *application* of scientific theory and technique to instrumental decisions. Professions like physicians give their practical problems to the scientist, who, after solving it, gives back to the professions the new scientific knowledge for application in practice.

Schön, D. A., The Reflective Practitioner. 1983.

Technical Rationality: Transferred to Medicine

- Treatments come from external science:
developed by pharmaceutical industries,
tested by epidemiologists and statisticians,
licensed by agencies,
assessed in reviews and HTA-reports,
directed through guidelines
(manipulated by marketing strategies)
- Practicing clinicians are more or less docile accessories of external evidence with little need for own judgement

Consequences

- Diminishing autonomy of clinicians
- Extensive external regulation of patient care
- Deprofessionalization, proletarianization
- Overwhelming bureaucracy
- Overmanagement of Medicine
- Enormous working load, restricted professional performance, minimization of time for patient
- *Lancet editorial (2005):* Doctors are utterly demoralised.

Professionalism – Epistemology of Practice

Tacit Knowledge
Gestalt cognition
Reflection in action

Epistemology of Practice

Model of *Technical Rationality* grossly oversimplified
Applicable only to simple, repetitive, novices' situation
It does not describe the complexity, which actually characterises professionalism and real life.

Schön DA, 1983

Epistemology of practice with central elements of

- *Tacit knowing inherent in practice*
- *Reflection in action*
- *Gestalt cognition*

Tacit (Implicit) Knowledge

- Experts know more than they can say.
- Characteristic feature of competence and expertise
- Tacit knowledge shows a higher correlation to professional success than conventional academic intelligence.
- If experts focus on rules → regress to level of beginners; performance deteriorates
- Rules, guidelines: helpful only for beginners
- „In bureaucratic societies ... there is the danger that expertise may be diminished through over-reliance on calculative rationality.“

Dreyfus 2005

Polanyi 1962, Neuweg 1999

Gestalt Cognition

- Gestalt = wholeness of complex relationships, conceivable independent from its parts
- Connoisseurship: ability to identify *Gestalt* pattern
- Experience is formed into *Gestalt*-cognition and forms the basis for expertise.
- Structure of *Gestalt* forms the logic of tacit knowledge; the highest form of it is the non-explicable abilities of scientific and artistic genius.

Polanyi *The Tacit Dimension*
Neuweg *Könnerschaft und Implizites Wissen*

Reflection in Action

- Confronted with problems, unexpected results, when tacit knowledge or external guidelines are insufficient, the practitioner might become a researcher in his own practice.
- Reflective conversation with the situation for finding solutions for the problem.
- Discovery of new phenomena.
- Experts can have an exceptional ability for creative thinking, produce new knowledge

Schön *The Reflective Practitioner*

Back to Clinical Judgement

Central Paradigm / Dogma:

David Hume:
Causality assessment in single cases
not possible

Is this true ?

Central Paradigm / Dogma:

Answer:
No. - It is wrong!

Gestalt Methodology of Clinical Judgement

Cause-effect-relationships can be recognised whenever a Gestalt (feature, pattern, structure) of the cause is perceived within the resulting effect

= Gestalt correspondence

Karl Duncker (1935)

Gestalt-Based Therapeutic Causality Assessments in Medicine

Kiene H: Komplementäre Methodenlehre, Springer 2001; ZaeFQ 2005(99):301-306

➤ **Strong criteria**

- Space pattern correspondence
- Time pattern correspondence
- Morphological correspondence
- Dose-effect correspondence
- Ping-pong (dialogue) correspondence
- Functional therapeutic Gestalt
- Functional therapeutic Gestalt process

➤ **Weak criteria**

- High pre-post time ratio
- Long-standing improvement

Why is Clinical Judgement Necessary in Clinical Practice ?

Clinical Judgement is Necessary as RCTs have Major Limitations

Kienle GS. ZaeFQ 2005; 99:289-94

RCTs-BIAS

- Commercial-bias
- Career-bias
- Bias of big number
- Preferences, ethical objections

Unreliable results in RCTs

- Weak external validity
- Divergent results
- Asymmetric results
- Mediocrity-bias

Limited relevance for clinical reality

- Discrepancy between clinical research and everyday medical practice
- Restriction of medical progress (formalisation, bureaucratization)

Health regulation

- Temptation of governing medicine by non-medical persons especially bureaucrats; centralized medicine

Clinical Judgement is Necessary in Guideline Development

„Guidelines cannot be
based on data alone;
judgement is unavoidable“.

Raine, *BMJ* 2004

EBM does not Reduce Uncertainty in Clinical Practice

David Armstrong, *Bio Societies* 2007

Artificial experimental situation

Has to be interpreted

*Numbers needed to treat of RCT-tested
treatments usually between **2 and 100***

➤ That means: **1%-50%** of patients will have a
treatment benefit.

? Which ones?

? What about the other 50%-99% of patients?

? How to treat them?

? How to judge treatment?

Clinical Judgement and Innovation

- Medical innovation continuously declines
- Excessive formalization, bureaucracy
- Great discovery in medicine were made by passionate individuals
- Finding new therapies switched from „clinical champion“, to industry; however, low efficiency
- Modern development driven by commercial interests (drug for everyone)
- In clinical practice spirit for innovation has been exorcised
- The brightest individuals, once attracted by medicine, now head to other disciplines

Lancet 2002; 359: 1857-8. *Lancet* 2003; 361: 695-7. *J R Soc Med* 2000; 93: 341-5. *Plos Medicine* 2004; 1(3):e34; *The Lancet* 2003; 362:339

Conclusion

Conclusion: Clinical Judgement

- central feature of medical profession
- essential in connoisseurship, expertise, excellence
- build by knowledge – external and implicit –, practice, experience, observation
- essential for
 - ✓ Patient care
 - ✓ Interpretation and complementation of external science
 - ✓ Health care organization
 - ✓ Innovation
 - ✓ Scientific progress

Conclusion for Health Care

- Clinicians deal with suffering patients every day
 - They make important observations regarding illness, interventions, patients needs, consequences of guidelines
- BUT, up to now**
- ➔ No influence backward on general levels
 - ➔ No methods and logistics of skimming of the knowledge pool and observations of clinicians

Internal Evidence

"The philosophical limits of evidence based medicine include failing to appreciate and cultivate the complex nature of sound clinical judgement.."

Kotaska A: *BMJ* 2004;329:1036-9

A system of *internal evidence* – the professionalized *sound clinical judgement* – should be established: Methods, quality assurance, quality assessment, communication, etc., it should be cultivated and appreciated in all decisions of modern health care on all levels

**Thank you very much
for your attention!**

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