Nursing Informatics AND Nursing Ethics: Addressing Their Disconnect Through an Enhanced TIGER-vision

Mette Kjer Kaltoft MPH, RN, Health Visitor, PhD student

mkaltoft@health.sdu.dk

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http://ebooks.iospress.nl/publication/34126
Declarations!

http://ebooks.iospress.nl/publication/34126

- I have a dream – to learn from his+her stories fairytales and time
- Like The TIGER Initiative – IHI – NHS; www.hcand.dk @10:30
- I acknowledge all visionaries present and past, visual decision aids + HalfDan Mahler’s multi-criterial personalised definition in 1984:
  - ‘Health is not bought by the chemist’s pills, nor saved by the surgeon’s knife.
  - Health is not merely the absence of ills, but the fight for the fullness of life’: Piet Hein
- WHO launch of ‘Health for All 2000’ and Walker and Schwartz
  - *What All nurses should know about computers*
- …Post this disclosure as a life-long-student of philosophia I dare go on, responding to a *Clarion Call from 1998* by Milton...
Paradigms, patient roles, power, patience

- **Imhotep (c2650–2600 BC)** Founder of medicine? ’brings peace’
- Hippocrates c400 BC father of .. “ALL ABOUT ME WITHOUT ME”
  “perform your duties calmly and adroitly, concealing most things from the patient while attending to him… revealing nothing of the patient’s future or present condition”
- **Florence Nightingale 1820-1910** Founder of …. rn Nursing
- 1984 WHO’s Health for All 2000 defines health multi-criteria wise
- Donald Berwick 2009, President CEO of IHI ‘Triple Aim’ says ”What ‘Patient-Centered’ Should Mean: Confessions Of An Extremist*: The experience (to the extent the informed, individual patient desires it) of transparency, individualization, recognition, respect, dignity, and choice in all matters, without exception, related to one’s person, circumstances, and relationships in health care. “NOTHING ABOUT ME. WITHOUT ME”
- Obama’s Health Reform Act 2010 23.3 mandates Shared Decision Making via Decision Aids
Maureen Bisognano
President and CEO, Institute for Healthcare Improvement

1st President and CEO
Donald Berwick ‘Promise to learn – commitment to act’
The Third Way: Cut Costs? NO
Ration Care? NO
New Designs? YES
Florence Nightingale’s Legacy
by IHI CEO Maureen Bisagnano:

- A focus on health and improving the health of those she served
- Strong attention to improving the experiences of care
- Management and the “business of caring”
- Creating the professionalism of nursing
- Leading an international learning system and spread mechanism (a “movement”)
- Launching nursing education and stimulating health care statistical methods and research processes

RN, President, CEO of IHI, FN Conference link* 2011 UK
In ”Patient-Centered Leadership: More than a Score”* IHI CEO M. Bisognano asks:

- ”Is (your organisation) engaged in patient-centered leadership. Or patient-satisfaction leadership? The distinction is critical... **Focusing only on patient satisfaction scores misses the point.**

- Truly patient-centered care seeks out and welcomes patient and family input, and fully integrates it into operation and organizational culture.

- This is the kind of fundamental and lasting change that’s urgently needed throughout health care”.

*updates@ihi.ccsend.com Oct 2012; Health Executive Nov/Dec 2012
Denmark and Region South: 12,206 km²
Population: 5.6 DK; 1.2 million RSD

Odense & H.C. Andersen
Children’s’ Hospital
OUHSvendborgSygehus
www.hcand.dk
www.odensezoo.dk

Cairo
23.3.85
Danish philosopher "Life is understood backwards, but it must be lived forwards" & Danish economist:

"Overall number of life years gained investing 30 million DKK

- Via the environment 1-3 life years
- Via accident prophylaxis 87 life years
- **Via screening** and treatment **180** life years
- Via *primary prevention* 840 life years

*"lifestyle disease"* (J.Soegaard: Report from consensus conference 1996 (DSI))
Florence Nightingale today?

Technology
Informatics
Guiding
Education
Reform

http://www.thetigerinitiative.org/about.aspx
Grid for Volunteer Development of TIGER Virtual Learning Environment

http://www.the_tiger_initiative.org/docs/TIGER_VLE_Overview.pdf
Nursing informatics is a specialty that integrates nursing science, computer science, and information science to manage and communicate data, information, and knowledge in nursing practice.

Nursing informatics facilitates the integration of data, information, and knowledge to support patients, nurses, and other providers in their decision-making in all roles, and settings.

This support is accomplished through the use of information structures, information processes, and information technology (Source: The Tiger Initiative)
Definition of Nursing Informatics NI: ANA 2008

- "The integration of nursing science, computer and information science, and cognitive science to manage communication and expand the data, information, knowledge, and wisdom of nursing practice”.

Nurses certified in Nursing Informatics:
- are skilled in the analysis, design, and implementation of information systems that support nursing;
- function as translators between nurse clinicians and information technology personnel;
- ensure that information systems capture critical nursing information.

- ... [possess the] competencies for providing safe, quality, and competent care”. (Source: The Tiger Initiative)
The theory – cognitive continuum

From informatics to decisionics via MCDA + Judemakia: a map of judgement & decision making

- The orientation of the map has no significance. North (i.e. a higher analysis to intuition ratio) is not better than South, *per se*.
- Quality is a third, altitudinal, dimension.

Poster presented today + QR @ 12:00 to 13:30 lunch break
The Nurse’s’ Dilemma:
How often are nurses faced with decisions?

- Once every 30 seconds in critical care (Bucknall, 2000)
- Circa 50 decisions every 8 hour shift in Medical Admissions (Thompson et al. 2001 – 2005)
- 5 judgement or decision challenges per consult for health visitors

C Thompson and D Dowding *Journal of Advanced Nursing* 2001 – 2004
Disconnect search 1+2 = 0 hits 2000 + of nursing Informatics AND nursing Ethics
To Disclose or not to disclose?

Nursing Ethics (NE): What do you value at point of care decision?

- To tell
- Not to tell

- Tell truth
- Confidentiality
- Autonomy
- Do Not Harm
- Do Good
- Be Fair/Justice

Nursing Informatics (NI): What do you know at point of care decision?

NI + NE = D@time
Template: decision aid provides opinion

What should I do? ... my Annalisa opinion

Scores
- Lifestyle Change
- Medical Treatment
- Surgery

Evidence on criterion preferences

Weightings

Evidence on option performance

Option scores
NI+NE (4+2 ethical principles) at time x

NURSING ‘DECISIONICS’

The Nurse's Disclosure Dilemma

Scores
1. Disclose prognosis fully
   - Score: 0.46
2. Deny possessing significant relevant information
   - Score: 0.46

Weightings
- Beneficence
- Non-Maleficence
- Autonomy
- Justice
- Veracity
- Confidentiality

NURSING ETHICS

NURSING INFORMATICS
MyDecisionSuite: an e-walking frame to support both patient and professional
Towards generic online multicriteria decision support in patient-centred health care

Health Expectations 2013

J Dowie, MK Kaltoft, M Cunich, G Salkeld 2013

http://online_library.wiley.com/journal/10.1111/(ISSN)1369-7625/earlyview
If health professional and patient both complete MDQ for a decision, we have a ready-made overall index measure of concordance, decomposable into weighting and rating differences.
Example in DQM: Danish Quality Model

2.1.3 Relative’s’ involvement in patient care

- ‘Institution informs and involve families in treatment in the extent the patient wants this.
- That staff are aware of the relative's desire for information and the resource may be dependent on patient progress’

**LUP question =** A Patient Reported Outcome Measure (PROM)

"To what extent were your relatives involved in the decisions to be taken on your treatment and care (examination / treatment)? “

2.1.4 Religious and cultural support for patients

- ‘The institution respects and supports the patient's religious and cultural needs. There are guidelines for how the institution identifies and supports patients and relatives, religious, and cultural needs, including offers to meet patient dietary wishes, the management of the patient's modesty, pastoral support and religious needs of death’
Translation into practice in the real world of Hans Christian Andersen: are Quality Models like the DQM a fairy tale like the Emperor’s new clothes?
Implementing the patient-related requirements of the DQM via Multi-Criteria Decision Analysis (MCDA)

DK uses WHO’s quality definition:
- Professionalism
- Patient safety
- Patient satisfaction
- Continuity of care
- Resource effectiveness
Summary: To be explicit and transparent, think system 1+2 for a 3rd Annalisa opinion MCDA-based = shared terminology and template for all

- to aid... ‘how nurses and other health care scientists more clearly identify clinical and other relevant data that can be captured to inform future comparative effectiveness research’,

- a prescriptive, theory-based discipline of '(Nursing) Decisionics' is proposed to expand the Grid for Volunteer Development of TIGER’s newly launched virtual learning environment (VLE), by providing

- an enhanced TIGER-vision for educational reform

- to deliver ethically coherent, person-centred care transparently .. for if not all then more by 2023?!
a healthEvisitor’s vision for Translation

What’s the matter?

Nursing Informatics NI & Nursing Ethics NE

What matters?

Care full decisions @all times

What might be lost?

..health,care,nature,nurture..
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- Jesper Bo Nielsen, Head of Department, Professor, Institute of Public Health, SDU: University of Southern Denmark, Odense, DK

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OUH Svendborg Sygehus, Department of Medicine, Funen, DK
Hans Christian Andersen (HCA) Academy Visiting Professor aka Jack Dowie introduces Annalisa to The Little Mermaid – as food for thought for full menu;
Should the Little Mermaid have accepted the Sea Witch deal?

Scores

- **REJECT**: 0.746
- **ACCEPT/KILL** the prince if he marries someone else: 0.500
- **ACCEPT/NOT KILL** the prince if he marries someone else: 0.500

Weightings

<table>
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<tr>
<th>PRINCE</th>
<th>LIFeto65</th>
<th>66-300</th>
<th>VOICE</th>
<th>PAINFREE</th>
<th>FAMILY</th>
<th>GUILTFR...</th>
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<td>0.125</td>
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Ratings

- **REJECT**
  - 0.000
  - 1.000
  - 1.000
  - 1.000
  - 1.000
  - 1.000
  - 0.970
  - 0.000

- **ACCEPT/KILL**
  - 1.000
  - 1.000
  - 0.000
  - 0.000
  - 0.000
  - 0.000
  - 1.000
  - 1.000

- **ACCEPT/NO**
  - 1.000
  - 1.000
  - 0.000
  - 0.000
  - 0.000
  - 0.000
  - 1.000
  - 1.000
John Snow's decision: 6 September 1854

Scores

Recommend removal of pumphandle immediately: 54.0%
Wait for more evidence before acting: 46.0%

Weightings

minimise CHOLERA DEATHS: 55.0%
maximise SCIENTIFIC RESPECT: 45.0%

Ratings

Recommend removal of pumphandle: 90.0%
Wait for more evidence: 10.0%
I’m amazed that you are able to bring me briefly into 2011, more than 100 years after I died.

Lady Ada... Lovelace?

Lord Byron, the poet's, daughter? No, I heard of her, but she was very ill by then... about 1850... And died very young. I recall she was working with an inventor on... what did they call it? ... a 'calculating engine'? What's the relevance of this?

She and that friend, Charles Babbage, are regarded as the inventors of what we now know as the computer... the thing which dominates our lives today. His would have occupied several rooms. Now they are no bigger than the

But you can be even prouder of the fact that you had started collecting and communicating the facts... the numbers and other data... that were needed. Needed, not only to establish the size of the problem, but also to provide the basis on which the systematic search for causes could begin.

Indeed, and that is what I spent much of my later life pursuing, not least in India and Egypt. I was exceedingly pleased to be the first women admitted to membership of the Royal Statistical Society as a result of this work... Statistics was always my first love. When God called me to nursing at 17 I knew he wanted me to exploit all the available ways to ensure nursing was truly effective, including mathematics and science.

That would be fascinating. Yes, that is another thing I feel good about. But good diagrams were not enough in my time. Surely that battle has been won by now.

You would be a big fan of Nursing Informatics as it’s known today... By the way, did you ever meet Ada...

You pointed out that "the enormous amount of statistics at this time... and the disposal of (or in their pigeon holes which means not at their disposal) is almost absolutely useless. Why? Because the Cabinet ministers...their subordinates, the large majority of whom have received a university education, have received no education whatever on the point upon which all legislation and all administration must—to be progressive and not vibratory—ultimately be based. We do not want a great arithmetical law; we want to know what we are doing in things which must be tested by results."

My letters have been kept? Yes, I was very frustrated, because I was working so hard to get people to accept the vital importance of collecting data... and getting them to do so... and then see it collecting dust!

You had realised the vital need to have effective ways of communicating the data and done a lot to help that by and devising novel ways to display it. Like your Polar area diagram... it’s still much used, though in modified form... if we have time we can actually play with the latest versions of your diagram at [http://understandinguncertainty.org/coxcombs](http://understandinguncertainty.org/coxcombs)

Meet me... Annalisa! I’m an interactive implementation of multi-criteria decision analysis, available online and on handheld Tabs. I combine the best available evidence with the patient’s preferences to identify the best option. Here are 2 nursing examples, one in the context of community screening for bone fragility, the other on whether there should be a trial of labour after a previous caesarean.

Not at all. The aim of the best of these systems is to balance the intuitive expertise of the human being with the analytical contributions science and mathematics can bring. They are particularly focused on incorporating patient’s views and preferences.

Sounds just the balance needed in an area such as nursing. Can you show me one of them?

"...the enormous amount of statistics at this time... and the disposal of (or in their pigeon holes which means not at their disposal) is almost absolutely useless. Why? Because the Cabinet ministers...their subordinates, the large majority of whom have received a university education, have received no education whatever on the point upon which all legislation and all administration must—to be progressive and not vibratory—ultimately be based. We do not want a great arithmetical law; we want to know what we are doing in things which must be tested by results."

You pointed out that..."
www.odense.zoo.dk

Meet HC Duck

www.hcand.dk by www.1030.dk/

Technology Informatics
Guiding Education Reform
Thank you! Questions or Comments?

mkaltoft@health.sdu.dk