Information and knowledge processes as a knowledge management framework in health care: towards shared decision making

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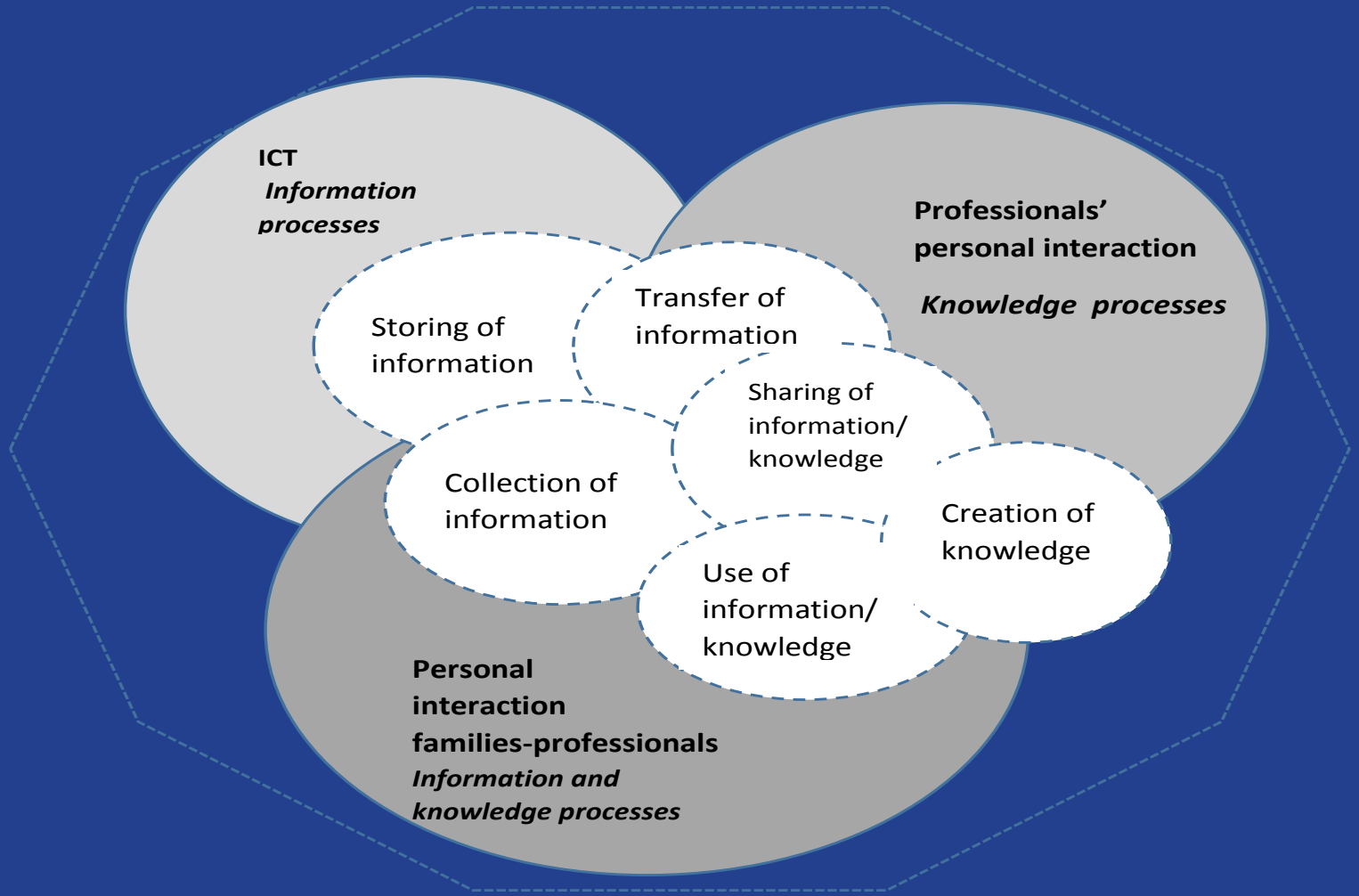
- **Medicine and health care are knowledge-intensive disciplines**
- **In health care the term knowledge management has been fairly unfamiliar and research of health care KM has been rare**
- **Some models and frameworks of health care KM have been presented**
    - (e.g. Orzano et al. 2008, French et al. 2009, Quinlan 2009, Sibbald et al. 2016)

Information and knowledge processes in health care

- knowledge/information acquisition/collection
- information transfer
- information storing
- knowledge/information sharing
- knowledge creation and construction
- information and knowledge use/synthesis

Känsäkoski, H. (2014) Value creation in childhood obesity care and prevention. Acta Universitatis Ouluensis B119. Oulun yliopisto: Juvenes Print. http://urn.fi/urn:isbn:9789526204130

Model of information and knowledge processes in health care



Shared Decision Making

SDM

- Health care is shifting from the paternalistic approach with the health professionals' hegemony towards a more patient-centred view.
- Patient centreness aims at meeting people's needs, helping them solve their problems and enabling them to achieve their goals and wishes.

Charles, C., Gafni, A. & Whelan, T. (1997). Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). Social Science & Medicine 44(5): 681-692.

- The patient should be informed about the risks and benefits of all available options in care.
- The patient's values are respected
- Good interaction, trust , good non-verbal communication, information quality, time to think…

- SDM is not only an informed consent

Makoul & Clayman (2006):

Essential elements of SDM

Makoul G, Clayman ML. (2006). An integrative model of shared decision making in medical encounters. Patient Education and Counseling 60(3):301-12.

1. defining and explaining the healthcare problem,
2. presenting options,
3. discussing benefits, risks and costs,
4. clarifying patient values and preferences,
5. discussing patient ability and self-efficacy,
6. presenting what is known and making recommendations,
7. checking and clarifying the patient's understanding,
8. making or explicitly deferring a decision,
9. arranging follow up

Information and knowledge processes vs. shared decision making

Shared decision making: essential elements	Information/knowledge process
Defining and explaining the healthcare problem	Information collection
Presenting options	Information/knowledge use Knowledge creation
Discussing pros/cons (benefits, risks and costs)	Information/knowledge use Knowledge sharing
Clarifying patient values and preferences	Knowledge sharing
Discussing patient ability and self-efficacy	Knowledge sharing
Presenting what is known and making recommendations	Information/knowledge use
Checking and clarifying the patient's understanding	Information/knowledge use Knowledge sharing and creation
Making or explicitly deferring a decision	Information/knowledge use Knowledge sharing and creation
Arranging follow up	Information/knowledge use

How do the information and knowledge processes support shared decision making?

Empirical study

- Data collected 2009-2012
- An Integrated Care Pathway (ICP) for obese children in Finland
- ICP: practice between primary and special health care
- Two University Hospital Districts which represent one case study with two embedded units of analysis

Data:

1. Interviews of 30 health care professionals (UA1 12, UA2 18)
2. Interviews of patients and their families in the UA1 (3+3)
3. A questionnaire for families in the UA2 (N = 13),
4. Field diaries in both UAs,
5. Documents of care path instructions in both UAs,
6. Notes of the meetings of the work group in the UA1

Qualitative case study

Analysis: qualitative content analysis

Findings 1.

– **Information collection / defining and explaining the health problem**

- Patients' and their families' involvement is dual. The patient is an object of examination, measurements, and tests. Current information about the patient is collected by anamnesis questionnaires or by professionals' questions
- Patients are active partners

– **Information transfer and storing / arranging follow up**

- Organisational practices and routines, information technology systems

Findings 2.

- **Knowledge sharing and creation/ discussing benefits, risks and costs, clarifying patient values and preferences, discussing patient ability and self-efficacy**
  - "…the personnel of the weight clinic has been very friendly… It has been so nice to go there although the weight issue has been so sensitive for the adolescent" (F5).
- **Information and knowledge use/ presenting options, discussing pros and cons, recommendations**
  - Families mainly as receivers of counselling

Conclusions

- The patients' and their families' participation in the information and knowledge processes was quite modest.
- The families should be encouraged to tell the health professionals more about their own thoughts and possible barriers concerning the child's weight management.

=> The counselling could be more efficiently tailored to the specific needs of the families and the families could participate into knowledge creation and shared decision making which could motivate them to do the necessary lifestyle changes.

- Cognitive imbalance – but the families are experts of their own lives.

Study limitations and further research

- The major limitations of the present study relate to the data of the patients and their families.
- Recruiting the patients to the interviews was challenging and made by proxy with the help of the nurses.
- Childhood obesity seems to be a sensitive problem for the families which may have influenced their willingness to participate in the study.
- The applicability of the suggested process model needs to be studied further in other contexts.

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Thank you!

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