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

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Effective knowledge management (KM) increases the outcomes of organisations. Medicine and health care are knowledge-intensive disciplines and the knowledge and knowing of the professionals are the most important organizational resources. However, in health care the term knowledge management has been fairly unfamiliar and research of health care KM has been rare (e.g. Sibbald, Wathen & Kothari 2016). The product of health care is intangible public good and the goal is not to produce profit but “public value”. Moreover, health care organisations’ activities are ruled by national laws and they are expected to perform in accordance with state health policies (Kothari et al. 2011, Rashman et al. 2009).

Health care is shifting from the paternalistic approach with the health professionals’ hegemony towards a more patient-centered view. Shared Decision Making (SDM) emphasises the patients’ active role (Charles, Gafni & Whelan 1999). This perspective aims at meeting people’s needs, helping them solve their problems and enabling them to achieve their goals and wishes. The earlier prevailing view of health care organisations, professionals and patients as separate units is moving towards a more collaborative approach which has also been suggested to improve health outcomes (e.g. Greene & Hibbard 2011, Shay & Lafata 2015).

This presentation introduces a model of information and knowledge processes (IKPs) in health care and scrutinizes the role of the patients and families in these processes focusing particularly on shared decision making. Organisational IKPs have been categorised into for example identifying information needs, information acquisition, organisation, storage, distribution and use, and sharing of knowledge (Choo 2002, French et al. 2009, Bouthillier and Sharer 2002). In health care, Frize and her colleagues (2007) describe knowledge processes as: 1) data access; 2) knowledge discovery; 3) knowledge translation; and 4) knowledge integration and data entries into electronic patient records, intranet, or Internet. This process model emphasises the role of information technology. Orzano’s and his colleagues’ (2008) conceptual model of KM in health care presents three critical processes of finding, sharing and developing knowledge which enable decision-making and organisational learning. The model focuses on the importance of collective knowledge in health care (see also French et al. 2009, Sibbald & Kothari, 2015). Quinlan (2009) divides health care knowledge work into three processes: creation of new knowledge during the transfer of knowledge, sharing and application of knowledge. She stresses the importance of communication and social relationships in these processes.

As a summary, IKPs according to the former

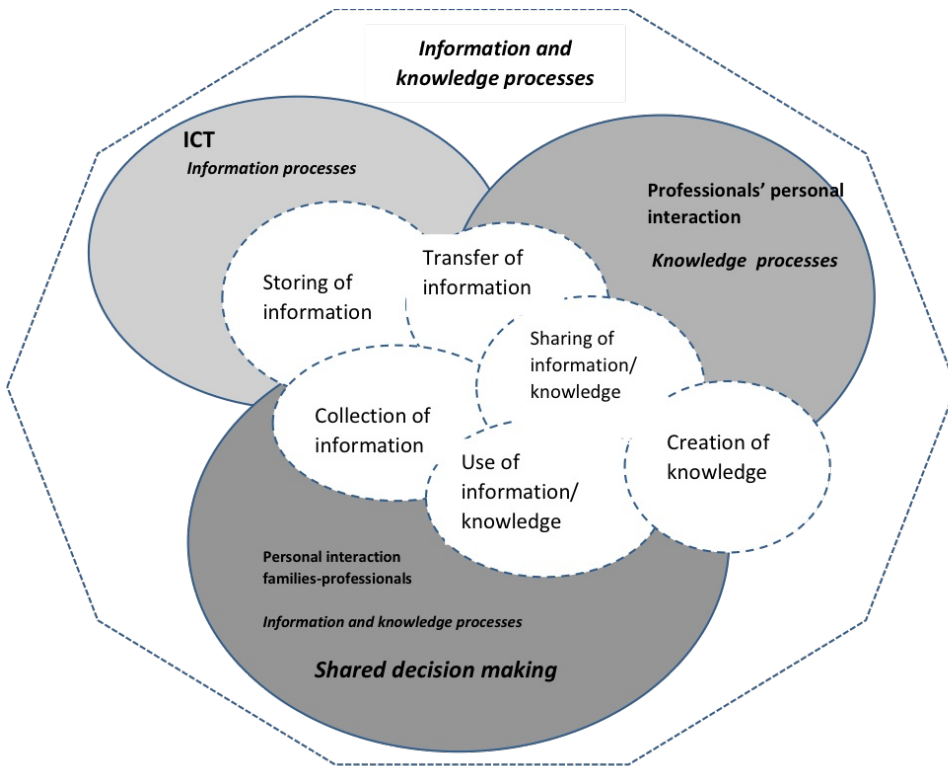


Figure 1. Information and knowledge processes in health care.

research literature consist of six essential elements:

1. knowledge/information acquisition/collection
2. information transfer
3. information storage
4. knowledge/information sharing
5. knowledge creation and construction
6. knowledge use/synthesis

The empirical study was conducted in two Integrated Care Pathways (ICPs) for obese children in two Finnish university hospital districts (UHDS) which in this study represent one case study. An ICP is a practice among Finnish primary and special care. Primary care provides care for children in health centres or child health/school clinics. The most severely obese children are referred to special health care.

The data were collected 2009–2012. 30 health care professionals (12 in special health care and 18 in primary health care) were interviewed, as

well as 3 mothers and children in UHD1. A family survey (N=13) was conducted in UHD2. Field notes, guidelines of childhood obesity care and prevention in primary and special health care in both UHDS and memos of the ICP work group meetings in UHD1 were used as document material. The analysis was qualitative content analysis of the transcribed interviews, document material and the open-ended questions of the survey. The survey was analysed quantitatively through descriptive statistics to support the qualitative findings.

The following model of information and knowledge processes in health care was outlined based on the findings. IKPs take place in interaction in social networks which consist of health care professionals and patients with their families, but some processes are mainly mediated by IT. These elements are parallel, overlapping and often simultaneous.

The study findings indicate that the patients' and families' role in the IKPs is fairly modest. Families are mainly involved in the process of information collection and they are receivers of the information and knowledge use of professionals. Shared decision making would require more knowledge sharing and knowledge creation in interaction among the professionals and the families.

The model was outlined in the context of counselling in childhood obesity prevention and treatment, but it can be used in other health care contexts, too. This detailed model enables the organisations to scrutinize their own information and knowledge processes and to identify the shortages in order to change practices. Earlier models of KM in health care focus on the processes inside health care organisations. However, the patients are and they should be essential stakeholders and active partners in health care and their role in the IKPs must be taken into account and studied further in future.

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