CONference abstract

It takes more than two to tango: A case study of Information and Communication Technology enabling a person-centered approach to diabetic care

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Introduction: The promise of Information and Communication Technology ICT to support the partnership between patients and healthcare professionals in a person-centered approach towards chronic disease self-management, is not fully understood 1, 2. Person-centered care PCC aims to actively involve the patient as an equal partner in and expert on living with a chronic illness in the care planning process 3. Results of studies on ICT enabling person-centered care are promising, with improved clinical outcomes, increased health-related quality of life and cost-effectiveness 2. However, hardly any of the ICT applications aiming to support chronic disease self-management facilitate the partnership between patients and healthcare professionals in use. A care model design that facilitates the partnership between the actors is lacking 4. Therefore, our research question is: How is the partnership between the patient and healthcare professionals supported through ICT in the context of chronic disease management?

Methods: We employed a qualitative method of an in-depth case study on an ICT-enabled PCC intervention: an Artificial Pancreas AP for type 1 diabetes. The AP was selected, since it met the criteria designed for: shared decision making, personalized ICT, health-related quality of life, and efficiency 5. In-depths interviews were held with identified key actors n=12. The interviews were transcribed, coded and analysed.

Results: The preliminary results show different ways of how the partnership towards disease self-management can be supported through ICT. First, the ability of the person to manage his disease will change the relationship with his healthcare professionals and – if suited - the patient can be more in control himself with the healthcare professional more at a distance. Second, the experience of the partnership will change due to an expected decrease of contacts with the internist and intensified contact with the diabetic nurse and a special AP-back up team. Third, the partnership will change as a result of the insights gained through data gathered from the device and the sharing of data.
Discussion: Even though the AP could play an important role in the self-management of type 1 Diabetes, the disease is not cured, and therefore a partnership between patient and healthcare professionals - though changed – will still be needed. The expected, changing role of healthcare professionals, as a result of supporting ICT-enabled PCC towards chronic disease self-management, requires the design of a new care model integrating this changing partnership.

Conclusions: Utilizing ICT-enabled PCC will change the partnership between patients and healthcare professionals towards chronic disease management.

Limitations: A case study ‘examplifies’ what goes on ‘in the real world of chronic disease management’. However, it does give insights in how the partnership is facilitated through ICT in a person-centered approach to chronic disease management, which could be the base for further research.

Suggestions for future research: The theoretical framework developed could be the base for further research on the impact of ICT in healthcare practice, after the AP has been implemented. Furthermore, the scope could be broadened to other chronic diseases than diabetics.

Keywords: information and communication technologies ict; person-centered care; chronic disease management; diabetes; care models