Chapter 58

Collaborative Participation in Personalized Health through Mobile Diaries

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ABSTRACT

Mobile and social media tools offer new opportunities for a more user centered, socially connected, and economically sustainable healthcare systems. A major focus of this chapter is to understand how to bring users to involve in their own everyday health management through mobile narratives, and new media as social platforms to incite social interaction in promoting healthier lifestyles. More in detail, the study discusses the utility of geo-located video diaries and social network, where the social interaction on the web and user-recorded video diaries create awareness and help subjects to self-reflect on their activities and aim to think for a health behavior change. The chapter experiences a focus project Locast Health Diary aims to provide a helpful set of tools for teen's risk at obesity to record their socio- psychological environment and everyday health routines through participatory workshops and evaluate the use of health diary tools for confronting obesity problems.

INTRODUCTION

Towards a Healthier Lifestyle through Mobile Interventions

Healthcare is in transition towards wellbeing in daily life of an individual. The concept of wellbeing derives from a healthier lifestyle requires a long-term relation with your everyday health, and co-producer with a good health status. With the improvement of mobile and social media technologies, health is moving forward for more participative, socially connected and economically sustainable solutions. Mobile technologies can help to manage everyday health, enable systems that can monitor, track, and respond to changing health status; and promote social health connections.

In todays health system three main issues have been considered: long-lasting chronic diseases and its burden to healthcare system, lack of consideration in patients' the socio-environmental factor in disease prevention, and the illness oriented approach of healthcare system where the patient is not regarded as a part of their solution.

Chronic Disease and Health Prevention

Chronic diseases are long duration illnesses and generally slowing progression such as heart disease, stroke, cancer, diabetes, and obesity. They require utilization of hospital services, medical sources and high necessity of healthcare providers, which results in high cost healthcare expenditure for both patients and/or government. Health damaging behaviors - particularly tobacco use, lack of physical activity, and poor eating habits – together with environmental problems are major contributors to chronic diseases.

However, these diseases are preventable and controllable by daily activities and changing 'unhealthy lifestyle choices.' Prevention requires a long-term management of everyday behaviors towards healthier habits such as eating nutritious foods, becoming more physically active and avoiding tobacco consumption. These self-manageable activities could prevent chronic diseases and therefore also prevent some of the important problems of the healthcare system. Self-managing an activity requires awareness of what you are doing and the mindset of whether what you are doing is right. As prior findings of the research (Arslan, 2012) shows that awareness of people's own behavior is the most underutilized health issue and being conscious of the situation anticipates an active participation in the prevention.

Patient Involvement in Health Management

Healthcare is a complex system where patients are not sufficiently considered as a relevant factor within the system. Rolyston (2004) states, "The biggest untapped resources in the health system are not doctors but users." The future of Healthcare in era of chronic disease shall turn on the full engagement of people in their own healthcare: the promotion of good health and prevention of illness. (Wanles, 2002) Active participation in long-term management with our own health would prevent chronic diseases; decrease health cost, enable more accessibility to services and decrease aging.

In order to answer social needs of today, information and communication technologies are becoming increasingly important in our life and are used in many areas of everyday healthcare-wellbeing context. Mobile phones are now a tool to access various applications and services from self-managing our health data by tracking and measuring our everyday activities to socializing in web platforms to generate collective action within a community. People who are a part of community have access to care and support from friends and neighbors. (Leadbitter & Cottam, 2004). Many scientists have done studies on understanding relations network and as Wing and Jeffery (1999) state that this network phenomenon might be exploited to spread positive health behaviors in part because people's perceptions of their own risk of illness may depend on the people around them. (Montgomery et al., 2003) As in Christakis (2008) work sharing information and experiences with other people socially allows them being motivated for a modification of their behavior. Participation and co-creation results in collaborative and distributed mobile interventions tapping into people's perceptions, expectations, desires, and motivations. It is also crucial as Zuboff & Maxmin (2002) argue that co-creation should provide people with the

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