Chapter 73

Dynamic Stress Management:
Self-Help through Holistic System Design

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ABSTRACT

Different kinds of applications for self-help are available on the Internet today. Some aim to intervene with users' life patterns such as negative stress exposure. It is not always an easy task to manage stressful life situations and to develop and maintain healthy living. It involves learning how to balance perceived demands from working and personal life, and to question underlying thoughts and beliefs. E-health communities can assist in this process through continuous interactions between community members. However, previous studies have shown that combining knowledge of health experts and the experiences of peers can create a good synergy. The question is how these findings can be applied to the area of stress management. In this chapter, the authors present a web-based self-help system for stress management based on a holistic view of actors and their different types of support. The system offers the user information in the form of research and real life stories, practical exercises (both text- and video-based), and the opportunity to interact with health experts and peers, all in an integrated way.

INTRODUCTION

Today, many people are on sick leaves due to high levels of stress (Henderson, Glozier & Holland, 2005; Dekkers-Sánchez, Hoving, Sluiter & Frings-Dresen, 2008). In Sweden, the stress-related diseases have even become the second leading cause

of sickness absence (Holmgren, Dahlin-Ivanoff, Björkelund & Hensing, 2009; Sandmark, 2007; The Swedish Social Insurance Agency, 2010). There are different factors that affect stress-related health problems. In previous studies it has been found that high or unclear demands, low control and low social support at work increase the risk of "job stress". If this state is prolonged, the risk of poorer health is overwhelming. Role conflict in the balance between work and family can occur

when demands from one sphere do not conform to the demands of the other, or when the individual's efforts to fulfill his or her role at work is disrupted by the demands of the family. In working life, it is shown that a disturbed balance between work and family can be a precursor to mental illness and impairment of wellbeing (Sandmark, 2007; 2009). Besides control and demands, social support is an important factor to counteract negative stress symptoms. Social support at work or in private life has a mediating effect of perceived stress and can to some extent prevent negative stress.

When dealing with stress-related health problems, Internet with its facilities for both information sharing and continuous interactions can play an important role. Open web-based systems allow people with high levels of stress to get in contact with health professionals and peers for support and guidance on a continuous basis. Self-help groups on the Internet have emerged in different health areas, and issues related to stress is one of them. There are also different types of web-based intervention systems that use different types of models for dealing with people's stress. However, existing systems tend to focus on either information or communication and do not look for holistic ways to combine these two. Most intervention systems also tend to have a separate chat for the users that is held apart from the rest of the system and not analyzed for patterns of communication or used for improvements in the overall intervention system. This is where this chapter begins. The chapter introduces a web-based stress management system that applies a holistic and communicative approach to intervention. This system is based on group interaction, information sharing and integration of different actors' knowledge.

BACKGROUND

It is becoming increasingly common for people to connect to and communicate with others through the many open communities on the Internet. Espe-cially in the health field, the online communities as well as the visitors of these have rapidly increased in number during the latest years. Whatever health goals people have, they can find like-minded people to collaborate with. Through the online communities people can give and receive support, ask questions, vent problems, share experiences and exchange information and advice.

The use of the Internet has shown to enhance patients' and citizens' knowledge and also their confidence in relation to health care (Fox, Ward & O'Rourke 2005; Mehra, Merkel & Bishop, 2004). It is now easier to find information and advice from several sources (Preece, 2000; Ellis & Bruckman, 2001; Maloney-Krichmar & Preece, 2005). The public's use of various medical sources on the Internet has made people find alternative medical advice or information on issues that their doctors cannot handle so well (Kling, 2000). While surgeons can be very good at operating, it is not certain that they are equally good at explaining how the aftercare and rehabilitation work. Such a gap can be filled by skilled and experienced people who share information and experiences on the Internet, for example in online health communities. A general characteristic of online communities is that they allow groups and individuals with common interests to meet virtually to collaborate, share resources and support each other (Preece, 2000). The online communication can help people widen their social circles (Sproull & Kiesler, 1991). Patients included in the self-help groups on the Internet have also expressed that they feel in touch with other patients as an important aid to cope with their diseases (Josefsson, 2007; Walther, Pingree, Hawkins & Buller, 2005).

There are online communities for self-help groups with various mental and physical illnesses, and also for people suffering from issues related to life patterns and how to cope with daily situations. One example is health communities for people who experience stress in their lives: their working lives, their private lives, or both. In order for us to understand these online communities and

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