

Keynote Speaker

Prof. Dr. med. Elisabeth Steinhagen-Thiessen

Biography

Prof. Elisabeth Steinhagen-Thiessen has been Chief Consultant and Director of the Protestant Geriatric Centre of Berlin since 1995, a cooperation between the Humboldt-University of Berlin and the Virchow hospital. Upon completing her studies in physics, chemistry and medicine she worked as an assistant doctor at several clinical institutes in Germany. After finishing her doctorate, Dr. Steinhagen-Thiessen worked at the department of biology at Haifa University (Israel) where she was active in the research project "biology of ageing". Upon returning to Germany, she worked at the hospital in Hamburg, where she completed her habilitation (university lecturing qualification) in 1985. Since then, Prof. Steinhagen-Thiessen has lectured at universities in Hamburg, Kassel and Berlin. In 1987, she was elected president of the international congress "Biomedical Gerontology" and was also the Chief Consultant at the "Albertinenhouse", a clinic for gerontology and rehabilitation in Hamburg. From 1987 to 1996 she held a C3-lectureship at the Virchow hospital in Berlin. During this time, Prof. Steinhagen-Thiessen was also the Chief Consultant of the Department of Gerontology at the Max-Burger-Hospital in Berlin. In 1997 she received a C4-lectureship in internal medicine/gerontology at the Charite in Berlin. Prof. Steinhagen-Thiessen has received several awards for her scientific research. Her dedication and ambition in and for gerontology is evidenced by her numerous memberships and activities in national and international gerontology organisations. Also active in publishing specialised literature, Prof. Steinhagen-Thiessen is the Director of the Federal Association of Geriatric Organisations in Germany.

Abstract

Ambient Technologies in the elderly population

Our aging society in industrialised countries is not only characterised by higher age and better health in general, but in age related capabilities and handicaps often based on chronic diseases and functional losses. Additionally multimorbidity can lead to functional losses followed by handicaps and disabilities. In consequence the elderly person can suffer from immobility, social isolation and depression. Furthermore it implies a high risk of losing his or her independence. The main aim for those elderly is to obtain their 'every day competence' in spite of lifelong handicap and chronic disease. Cause of new developments in ambient technologies there is a challenge to supplement multi- and interdisciplinary approach to fulfil these aims. Ambient technologies as part of information and communication technologies have a great potential to influence quality of life for elderly people and prolong their independence. We will report about different examples of ambient technologies for this challenge. In 'Tele-Reha', a tele-rehabilitation-project, mobility-impaired patients after discharge from hospital, their caregiving relatives, and geriatric professionals were comprised using PC-based videoconferencing systems. Additionally they got access to a computer based information service. The objective was to prevent social isolation, more functional disabilities and secondary diseases which may result in the frequent need for outpatient or inpatient treatment. Another project focused on patients after stroke or hip fracture by sensor technology based home rehabilitation. Most of our patients have not reached their full potential of mobility and independence after the hospital. We conduct studies to investigate the feasibility of a sensor based home exercise program for motor learning. The project 'nutribook' was developed for patients with severe chronic nutrition deficits who live at home and have ambulant services by nurses and their family doctors.

A special electronic patient record software analyses food and fluid intake and offers practical propositions to prevent malnutrition. Beside these examples we will report about Web portal with a focus on health and care problems of elderly people. This portal provides information about specific health related topics as there are: dementia, heart failure, nutrition, diabetes mellitus, incontinence, stroke, rehabilitation and much more topics. Additional professionals are answering health related questions in a guided chat room. All these different projects are well accepted by the elderly. They may improve quality of life and independence in daily activities, maintain functional capacities and prevent social isolation, a result of a sum of beneficial effects. But there is still a big lack in the development of ICT as a part of AT and AAL in terms of usability, evaluation of effectiveness and economic benefits as much an effective integration into existing health care systems.