

Title: Noval approach in bath system to help carigiver to care beddrieden people

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This work presents the development in the field of Ambient Assisted Living, more specifically in the caregiving of bedridden people. From a global viewpoint caregiving of bedridden comprises the following areas: hygiene, comfort, safety, mobility and medical care.
Usually two caregivers are required for nursing a bedridden patient. In the framework of this propose it is aimed to develop applications, which enable one person to perform all care tasks of a bedridden. Therefore, the entire study takes the main user's perspective into account, the caregiver, who is responsible for a wide range of tasks, suffering physical and psychological exhaustion over time.
Considering to focus the work in one specific area, the most important area to develop a novel equipment solution being used solely by one caregiver is the bath. Thus, the main objective to development of a methodology to assist caregivers during bathing in a home environment.
In this respect, the new design of a bathing system is made up of two modules: i) heating and water supply at a defined temperature and flowrate required for the bath, and ii) an inflatable mattress, which enables to bath a bedridden while using the patient's bed as physical support. Based on subsequent systematic studies that have been conducted by to test the prototype in institutions that provide home care services, the development also provided a new procedure that intended to assist the bathing bedridden patients. The methodology is systematic, generic and does not depend on the bathing system used. It is therefore one of the main contributions from this proposal.

Biography

She is PhD in Mechanical Engineering from the University of Minho, Portugal, and holds a research grant from CAPES, Brazil. As researcher and specialist of different multidisciplinary areas joins design and engineering in the areas of ambient assistive technologies and assistive living, such as the quality of life of bedridden people, medical products, textiles and social design for underprivileged communities. The combination of design and engineered functionalities not only adds a functional value to design products and improves the quality of life of individuals but also increases their importance to society. She has also participated in international conferences where she showed her professional achievements.

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