In a study done by Verbunt and Bartneck, in 2010 entitled “tactile feedback for the prevention of decubitus ulcers,” a technology is defined which is able to diagnose patient’s inappropriate status and present an instruction to change his status. Changing status resulted in less risk of decubitus ulcer. This device includes a belt that receives a simple tap to a strong pressure as a signal, and this signal announces changing patient’s natural status to patient and health care providers. Wireless sensor networks are increasingly changing for telemedicine applications, monitoring patients, both in clinical conditions and at home. Using them will reduce user’s discomfort and expenses, and increase mobility. Using smart systems and wireless sensor networks, depending on users’ needs, will also collect information regarding users and their environment. In smart beds, to enhance the capabilities of the bed and its physical characteristics, smart beds are made by a combination of a sensor network, information devices and control by computer, which is able to generate waves and signals for mobility and increasing blood flow in inpatients and prevents decubitus ulcer and lesions resulting from hospitalization.

Therefore, for decubitus ulcer prevention smart beds are useful especially for elderly people, patients with prolonged hospitalization or no motion and hospital staff in order to monitor patients’ treatments and decubitus ulcer and widespread use of it needs experienced specialists and relevant systems focus.

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