Mobile Applications Development in Nursing Care Bed

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Abstract

Neither urinary incontinence (UI) nor fecal incontinence (FI) is a common problem faced by adults and elderly patients. These are commonly encountered in nursing home residents, and are associated with significant morbidity and utilization of health care resources (Leung, 2009). The management of urinary incontinence and fecal incontinence require appropriate evaluation by qualified clinicians. Use of special undergarments and absorbent pads has been used with apparent success in the treatment of fecal incontinence. However, changing elderly absorbent pads periodically is more important to preventing rash (dermatitis dermatitis), odor and infections. Studies have shown that most people with incontinence need to change their adult diaper between 5-8 times a day. In addition, it is extremely important that patients with bowel incontinence change their diaper, immediately when it becomes soiled (Dianna Malkowski). In most current practices, caregivers make manual checks of diapers and write notes about activities. This is time consuming and can be inexact (Simavita). New technologies have eased the path to solving this problem. An Australian company has come up with an electronic diaper which is a small electronic sensor that is placed on an aged care resident's incontinence pad to detect urinary discharge (HealthSite). The system wirelessly transmits incontinence data to a server. The incontinence data collected is synchronized and processed with the incontinence-related observations that are recorded by staff via the Smart Incontinence Management (device) assist application. In this manner, caregivers are notified immediately and can change the resident's pad, keeping the resident cleaner and more comfortable (Simavita). However, the use of mobile devices by health care professionals (HCPs) has transformed many aspects of clinical practice (Ventola, 2014). The aim of this study is to determine the role of mobile applications development to provide an application in nursing care bed in evaluation of patients with urinary incontinence and fecal incontinence.

Publications

1. Dawoudi M.R. (in press) Neurocognitive, Biologicals and Genetics factors and the Risk of Developing Borderline Intellectual Functioning (BIF) Disease among Kurdish Societies. Proceedings of the International Conferences on BioMedical Engineering and Health Care Systems.

2. Dawoudi M.R. (in press) Nursing and Technology foresight in Futures of a Complex World. Proceedings of the International Conferences on BioMedical Engineering and Health Care Systems.

3. Dawoudi M.R. (in press) Electronic Personal Health Record Systems Development Based on Integrated Medical Information. Proceedings of the International Conferences on BioMedical Engineering and Health Care Systems.

4. Dawoudi M.R. (in press) Alignment of Life-Story and Electronic Medical Record as a Medical Diagnostic Support tool (DST) for Mental Health Disorders. Proceedings of the International Conferences on BioMedical Engineering and Health Care Systems.

5. Assessing pain using Morbid Motion Monitor System in the Pain Management of Nurse practitioner. World Academy of Science, Engineering and Technology International Journal of Nursing and Health Sciences Vol:2, No:5, 2015



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