

Disability Assessment: The Efficacy of Multimedia Interactive Nurse Education

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ABSTRACT

Background: Nearly 3% of the population in Taiwan is classified as disabled. Disability assessment directly relates to long-term care quality and resource allocation.

Purpose: The purpose of this study was to explore the effects of a multimedia interactive DVD on enhancing nurse knowledge and disability assessment skills.

Methods: The study was a quasi-experimental design. The experimental group received multimedia interactive DVD, and the control group received conventional classroom education. The study gathered data using scales assessing knowledge related to disability assessment and case studies. Scales were implemented before and after multimedia interactive DVD interventions at weeks 2 and 4. In-depth interviews with voice recording were used to collect qualitative data to elicit differences in perception between the experimental and control groups.

Results: This study found significant improvements in the experimental group in terms of disability assessment knowledge and case study assessment skills. These improvements lasted through at least 1-month posttest. Analysis of interview data for the experimental group showed that the multimedia interactive DVD provided a more flexible approach to learning than classroom education and improved participant self-confidence to conduct disability assessments.

Conclusions/Implications for Practice: The study showed the effectiveness of the developed multimedia interactive DVD in significantly improving the disability assessment confidences of nurses. Study findings can be used as a reference guide for continuing educational efforts in long-term care settings.

KEY WORDS:

multimedia, disability assessment.

formulate care plans and goals. Disability is an important element of care planning and intervention effectiveness. Disability assessment enhances patient management intervention design and health reporting. Therefore, healthcare needs are necessarily accompanied by disability assessment.

Nearly 3% of Taiwan's population is defined as disabled (Council for Economic Planning and Development, Executive Yuan, 2009). Disabled refers to people with disorders affecting activities of daily living (ADLs), instrumental ADLs (IADLs), and cognitive and mental functions. Taiwan's population of 573,752 disabled individuals in 2008 is estimated to rise to 1,398,628 in 2046. At the close of 2011, Taiwan had 1,093,219 officially registered mentally or physically handicapped citizens. This represents 4.71% of the total population and a 0.06% increase over 2010 levels (Ministry of the Interior Department, 2011). The number of disabled individuals who failed to function in over three ADL categories totaled 256,653 people in 2008. This number is expected to increase to 759,432 by 2046, highlighting a rapidly growing disabled population in Taiwan (Kao & Chiu, 2004).

Disability generally refers to defect-related limitations on daily living performance (Ling & Chiou, 2004). Long-term care is a series of long service measures designed for people with congenital or acquired dysfunctions or difficulties, which can be adjusted according to degree of disability. This makes accurately assessing the disabled even more important. To address this challenge, several instruments have been developed to date, and a large number of concepts and definitions have been developed and put into operation (Noonan et al., 2009).

Disability assessment is a complex and multifaceted process of exploration and evaluation (Hesse & Gebauer, 2011). Kane and Kane (1981) suggested that disability assessments include the assessment of ADL accomplishments. ADLs include 10 daily activities such as eating, shifting, personal hygiene,

Introduction

Assessing physical functions and disabilities is an important part of clinical evaluation, as it shows the ability of an individual to function in general areas of life (Fountoulakis et al., 2012). In practice, the healthcare team, including physicians, nurses, occupational therapists, physical therapists, and others, rely on their professional assessments to

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