The Effects of WeChat-Based Teach-Back Health Education on Patients With Advanced Cancer Pain

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BACKGROUND: Providing effective health education is essential for patients with cancer-related pain. One solution is leveraging instant messaging tools for teach-back health education.

OBJECTIVES: This study investigated the effects of WeChat-based teach-back health education on patients with advanced cancer who underwent patient-controlled intrathecal analgesia implantation and used hydromorphone.

METHODS: This retrospective study evaluated 150 hospitalized patients with advanced cancer pain. Patients were classified into a conventional health education group (N = 50) and a teach-back group (N = 100) based on whether they received WeChat-based teach-back health education. Pain was rated using a numeric rating scale, and sleep quality was measured using the Pittsburgh Sleep Quality Index at one, two, and three months postdischarge.

FINDINGS: Patients who received remote teach-back health education better managed their pain. Data also demonstrated improvements in patients' sleep quality and caregiver satisfaction, and reductions in the occurrence of adverse reactions.

KEYWORDS
cancer pain; teach-back education; remote monitoring; pain management

DIGITAL OBJECT IDENTIFIER
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ONE OF THE PREVAILING CLINICAL MANIFESTATIONS IN PATIENTS with advanced cancer is the presence of severe pain, which is also the symptom that patients with cancer report fearing the most, significantly impeding their daily functioning (Coveler et al., 2021; Rodriguez et al., 2019; Virgen et al., 2022). Despite advancements in tumor screening technology and treatment modalities, which have led to enhanced patient survival rates, the persistence of chronic cancer pain during extended periods has emerged as a pressing concern in clinical practice (Liu et al., 2021; Sung et al., 2021; Xia & Aadam, 2022). There has been an increasing trend among patients with advanced cancer to opt for patient-controlled intrathecal analgesia (PCIA) to alleviate pain, as evidenced by the growing body of research on subarachnoid administration (Aman et al., 2021; Duarte et al., 2023; Dupoiron, 2019). This technology administers the drug directly to the subarachnoid space, enabling direct action on the spinal cord center and facilitating accurate, efficient, and continuous control of severe pain. However, patients with advanced cancer often lack comprehensive knowledge about this treatment modality (Kim et al., 2019). The implementation of health education measures pertaining to PCIA is important, necessitating medical personnel to dedicate substantial effort in providing detailed health education to patients and their caregivers (Prochnow et al., 2019).

Background

The teach-back health education (TBHE) model requires patients or their caregivers to articulate the knowledge or skills they have attained (Choi & Choi, 2021; Ryan-Madonna et al., 2019) and, in the event of nonattainment, undergo reeducation until the patient or their caregivers can acquire the pertinent knowledge. In contrast to conventional health education (CHE), the TBHE model represents a bidirectional mode of information transmission. This model not only facilitates the cultivation of favorable cognitive attitudes and behavioral patterns among patients (Oh et al., 2023), but also fosters a more harmonious healthcare interaction (Cvetanovska et al., 2023). Consequently, it has gained significant traction in the realm of health education and the ongoing management of diverse medical conditions. The TBHE model, while offering several benefits, is hindered by temporal, spatial, and medical resource constraints, particularly when addressing the needs of