

Case Report

Alone with all this Pain: Treating a Herpes Zoster Geriatric Patient in a Rural Clinic in Israel

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Abstract

Pain has become a topic of much interest amongst health care teams especially among nurses. The literature suggests that about one out of seven members of the elderly population is reported to have chronic pain. Herpes Zoster occurs predominantly in the older adult population. This elderly population age 65 and up is ever increasing and their health and welfare needs represent a growing challenge. Occasionally health care teams invest more effort into reducing pain than relating to the patient as a whole. This paper presents a nursing case study that illustrates that rural nurses see the patient as a whole because of the nature of their work in the community, and positively influence chronic geriatric patient care. Geriatric patients suffering from pain have the opportunity to interact with the nurse on a daily basis in the rural setting thereby supporting a bio-psychosocial approach to care and recovery.

INTRODUCTION

Pain has become a topic of much interest amongst the decision makers and the health care teams in the health system especially among nurses. Pain is an unpleasant sensory and emotional experience that is related to actual damage or the potential for damage to tissues. It is considered to be a complex phenomenon influenced by memory, expectations and emotions [1]. The International Association for the Study of the Pain (IASP) defines chronic pain as pain that persists or is continuous for three or more months at any degree of strength but without the signs and symptoms of acute pain [2]. The emotion that accompanies chronic pain is usually depression. If it is left untreated, it may lead to emotional and physical deterioration. The prevalence of chronic pain with neuropathic characteristics has been reported to reach 7-8% in the general population [3]. Between 10-20% of the population aged 50 and older who suffered from Herpes Zoster will develop Post Herpetic Neuralgia (PHN) [4,5]. Neuropathic pain is a result of injury or disease involving the peripheral or central somatosensory nervous system. Neuropathic pain is one of the most complex types of pain that medicine has to treat. It is different in nature from other forms of pain because it is characterized by being chronic and persistent with occasional outbursts of severe pain [6]. The literature suggests that about one out of seven members of the elderly population is reported

to have chronic pain. Although there is high prevalence of pain in older adults; pain management in this population is still a neglected topic [7].

Herpes Zoster (HZ) is a common neuro-cutaneous infection [8,9]. It occurs predominantly in the older adult population and at a rate of 10/1000 cases per year in adults above 75 years of age [10]. This elderly population age 65 and up is ever increasing and their health and welfare needs represent a growing challenge [11]. A recent study in Israel demonstrated an annual risk of HZ in the general population of 3.46/1000, and PHN as a complication developing in 5% of HZ patients, [4,12,13]. The same study from Israel demonstrates 277/2092 cases or 13.24% proportion of the population in the age group of this paper's case study (75-84 years) suffering from PHN as a result of HZ [12]. HZ is perceived by patients to be an acute viral disease and in most cases, is painful. The acute disease will develop into a chronic disease due to the persistent neuropathic pain. This chronic pain is called Post Herpetic Neuralgia (PHN). The pain resulting from the disease has proven to have an impact on the health and well-being of these patients, thus influencing daily living functioning and can lead to inactivity or confinement to the home completely [13,14]. Schmader *et al.*, revealed negative impact on all areas of activities of daily living (ADL) and on quality of life particularly on: sleep, general activity, leisure activity, leaving the house and

shopping [15]. Appropriate pharmacological treatment of chronic pain syndromes, consists of opiates with anti-depressants or anti-convulsive medication and has proven effective in pain management for these patients [16-18]. Despite the fact that prompt identification and diagnosis has proven to be key to effective treatment and consequent pain management, health care teams invest more effort into reducing pain than relating to the patient as a whole, especially among the elderly. Therefore, despite ongoing efforts to raise standards of care in the area of pain management, patient assessment and reassessment after the administration of medications by nurses and physicians are still lacking [19].

In the community there is a need for a solid tertiary strategy to effectively intervene and lessen this "burden". This strategy could be planned and practiced by the community or rural nurse [19]. For the most part HZ and PHN patients are found in the community setting. Because health care is directed to prevention and early detection, the nurses working in this setting are on the frontlines of patient care. Community nursing is varied and dynamic and healthcare is practiced in a variety of settings: from urban public health clinics to rural nursing in isolated farming or indigenous communities [20].

CASE STUDY

The patient is an 83 years old male, a native of Argentina, married with adult children and a Kibbutz resident in the Negev desert. The patient is independent has hobbies, goes to lectures and travels. He suffers from various chronic diseases such as: hypothyroidism, hyperlipidemia, hypertension, chronic renal failure, Chronic Obstructive Pulmonary Disease (COPD), Chronic Ischemic Heart Disease (CIHD) and Non-Hodgkin's Lymphoma. He receives maintenance treatments for Lymphoma and undergoes a PET-CT every three or four months as part of follow-up for the Lymphoma. He is well-educated and has good understanding of his illnesses and high adherence to his treatments. He enjoys sharing his thoughts and medical experiences with the kibbutz nurse on his visits to the clinic in the kibbutz. In the first week of December 2012 the patient visited the clinic nurse with the complaint of local itching and irritation under the skin in the area of the scalp and left cheek with no signs of skin rash. When questioned further, he admitted that the itching was actually pain and that it had begun twenty days prior to that visit. The family physician referred him to a dermatologist. The following day, a rash appeared on his face, accompanied by severe pain. At this point the family physician prescribed the established treatment protocol for herpes zoster: anti-viral, antibiotic and analgesic. During the next week the patient remained at home while the lesions formed scabs on his face and left temple area, with the exception of short visits to the clinic to for medical and nursing follow-up. In the third week, he was diagnosed with Post Herpetic Neuralgia (PHN), and an antidepressant (Amitriptyline) was added. During the following days and weeks he continued with these medications, having the doses titrated by the family physician as per his condition and complaints. His analgesic medication was increased and an anti-epileptic (Pregabalin) was added for the neuropathic pain, easing his discomfort and reducing pain to 3-4 on the Visual Analog Scale (VAS) pain scale. Considerable time was invested by the clinic nurse in formal

and informal conversations with the patient in order to allow him to vent his experience and feelings. Pain was assessed with the 1-10 VAS pain scale and analyzed as per the McGill pain questionnaire created by Melzack [21]. In the acute stage the patient assessed his pain as per the Present Pain Index (PPI) as 4-5 which is defined as: horrible, distressing and excruciating. In an assessment performed three months later the PPI was 2 which are defined as: uncomfortable.

After five to seven months the patient reported more time periods with less or minimal pain. Perhaps this was due to several factors: the natural course of the disease, patient motivation and compliance together with adequate pain management. However the active involvement of the clinic staff, both nurse and doctor together with the accessibility of the nurse clinic doctor/health care team played an important role in the patient's sense of well-being. Possibly enabling the patient to feel confident in the bio-psychosocial approach of the nurse and to share his feelings with the nurse particularly when the intolerable pain caused him at times to consider suicide as an option for "relief" from the suffering. The patient's pain level decreased significantly with daily Pregabalin (75mg+150mg/day) and he was able to resume his usual activities and hobbies.

Discussion and Implications of Rural health nursing for pain management in the geriatric patient

Rural nursing is very generally defined as the nursing care given to rural areas that are sparsely populated. The definitions are clearer in countries such as Australia, Canada and the United States where there are vast distances between small rural areas and medical centers (at times hundreds of kilometers) [22,23]. In Israel rural nursing is practiced in small farming communities (Kibbutz & Moshav). Kibbutzim (singular: Kibbutz) are collective communities characterized primarily by economic cooperation. The kibbutz is an important link in the historical background of the commune in Israel. It was a unique development that arose from various factors, both ideological and political [24]. These collective communities are agriculturally based, although most also have small industries with populations that range from 200 to 900 members. Historically, the health services on the kibbutz were perceived as responsible for the members' health and institutionalized preventative medicine and ambulatory care for the members even in the early stages of its' existence. Remnants of this perception are still evident in kibbutz nursing today. Research notes that the healthcare of Kibbutz members is better than those of the general population, with evidence of longer life expectancy and improved health [24,25]. Research of rural nursing in other parts of the world has demonstrated that there are certain characteristics of the rural population that are shared such as: hard-working individualism and alternatively interdependence with others, self-determination and self-reliance. These characteristics could influence health, health related decisions and the consequent healthcare delivery by rural nurses [20].

The nurses in the kibbutz clinic are relatively independent and are actively involved with the population they care for. Moreover they have frequently earned their patients' trust. Historically rural nurses in Israel were expected to show a high level of expertise,

professionalism and decision-making capabilities [24,26,27]. Accessibility to rural nursing care in Israel should enable the geriatric patient who develops HZ to be identified and treated as promptly as possible, thereby enabling supportive nursing care, and potentially reducing the development of psychosocial complications of HZ. Nurses in this setting are integral to the successful diagnosis, treatment and symptom management of the patients with HZ [28].

CONCLUSIONS

The health care team aspires to see these geriatric patients return to their best possible functioning on all levels despite the acute illness of HZ and the chronic suffering caused by PHN. Nurses are key to this transpiring. They are those on the front lines of diagnosis, treatment and supportive care. The collective factors of their empowerment as a professional body and their familiarity with the local population, promotes confidence in their patient care actions. The rural nurses practicing in the kibbutz clinic have the knowledge and insight regarding their geriatric patients to ensure this happens. This setting together with the nurses' familiarity and knowledge of the community in which they serve, supports early detection of the disease and warrants delivery of high quality care with a comprehensive biopsychosocial approach, thereby promoting patient well-being [29].

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