Resource Based Relative Value Scale and Classification of Advanced Nursing Practices by Hospice Nurse Practitioners in South Korea

JinHyun Kim, YangSook Yoo, KyoungA Lee and KyungSook Kim*

1 Professor, College of Nursing, Seoul National University, jinhyun@snu.ac.kr
2 Professor, College of Nursing, Catholic University, ysyoo@cmcnu.or.kr
3 Doctoral Degree Student, College of Nursing, Seoul National University, tj720221@snu.ac.kr
4 corresponding author, Assistant Professor, Department of Nursing, Namseoul University, kgs4321@hanmail.net

Abstract. The purpose of this study was to classify and identify the workload of advanced nursing practices conducted by hospice nurse practitioners. The workload for the practices of hospice care in hospice nurse practitioners was measured with the Resource Based Relative Value Scale (RBRVS) and nursing time. The workload for “Coordination of family conflict” was the highest while “Refractory cancer pain management” had the lowest workload among the 11 advanced nursing practices. To improve the current system of hospice and palliative care for hospice nurse practitioners, a clear classification of advanced nursing practices and the establishment of a reimbursement system are necessary.

Keywords: Hospice nurse practitioner, Workload, Advanced nursing practice, Resource based relative value scales (RBRVS)

1 Introduction

Hospice care is achieved with an interdisciplinary team approach consisting of physicians, nurses, social workers, and spiritual leaders, and it is an activity that relieves the pain and symptoms of terminal patients. In addition, hospice helps terminal patients have a dignified death and deal with bereavement and help their families to cope with their loss and to adapt.

In the United States, the modern hospice movement started in the 1960s and was institutionalized in the early 1990 and continues to evolve. Specialists in hospice and palliative care include clinical experts, researchers, educators, counselors, and advocates in various administrations [1].

Hospice nurses have various roles including psychological symptom management, support of patient and family, training and consultation for the actual problem, adjusting the patient’s treatment and care planning, bereavement and family counseling [2][3][4].

In South Korea, nurse practitioners caring for a terminally ill patients need specific training. Health care providers working in healthcare need 60 mandatory hours of
standard education for hospice and palliative care. Nurse practitioners in hospice and palliative care must get a master's degree from specified educational institutions and curriculums, and they must pass an exam. However, hospice and palliative care in the medical system of Korea still has not been institutionalized, and practical and systematic studies on the role of hospice nursing care related laws are lacking. In addition, the roles of hospice nurse practitioners have not been identified and analyzed specifically. Therefore, the aims of this study were (1) to classify advanced nursing practices of hospice and palliative care, (2) to measure the nursing workload of hospice nurse practitioners, and (3) to investigate the contributions of hospice nurse practitioners.

2 Research Method

This study was conducted in two phases. First, advanced nursing practices of hospice nurse practitioners were classified by a research team and hospice nurse practitioners. After making a list of advanced nursing practices, the nursing workload of each practice was investigated with the Resource Based Relative Value Scale (RBRVS) method. The RBRVS was actually applied to calculate the National Health Insurance (NHI) fee in South Korea. The RBRVS was estimated using relative physical skill and effort, mental effort and stress from each practice. And working time was measured by one-on-one observation with hospice nurse practitioners during working hours over one month. Then, the nursing workload was calculated by multiplying the each RBRVS by the work time.

Before the survey, informed consent was given by the participants, and they were notified that they could withdraw from the study at any time. Access to the data was strictly limited to the researchers.

These results were analyzed with descriptive means, standard deviation, range of the score, and t-test with SPSS.

3 Results

There were 46 hospice nurses that completed the survey, and they were all women with an average age of 32.7 years (30.1 ± 6.90). The average working career of the nurses was 9.6 years, and the average working career in a hospice unit was 4.3 years.

In this study, hospice nurses performed the following nursing practices for patients: physical care, counseling and education of family members, management related to administration, other related services. To classify advanced hospice nursing practices, except for general tasks of nurses, the unique activities of hospice nurse practitioners were only classified. Eleven practices were finally classified. The 11 practices were classified as advanced nursing practices of hospice nurses by the hospice nurse experts and research team.

The calculated scores of the resource based relative value scale (RBRVS) for the 11 advanced nursing practices ranged from 100.0 to 227.9 with an average score of
159.6 points. The RBRVS score for “Initial interview upon hospitalization” was the lowest and “Caring for patients in impending death” the highest. Performing the “Coordination of family conflict” had the longest time taking 70 minutes 1 second. It took just 12 minutes 25 second to perform “Refractory cancer pain management”.

The workload score, which included the RBRVS and nursing time, for “Coordination of family conflict” was the highest among the 11 advanced nursing practices at 14,461.6.

**Table 1.** Resource based relative value scale and nursing time of advanced nursing practices by hospice nurse practitioner

<table>
<thead>
<tr>
<th>Advanced nursing practices</th>
<th>Resource based relative value scale</th>
<th>Time</th>
<th>Workload (RVS*T)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical skill</td>
<td>Mental effort</td>
<td>Stress</td>
</tr>
<tr>
<td>Initial interview upon hospitalization</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Whole patient assessment</td>
<td>146.2</td>
<td>201.5</td>
<td>146.2</td>
</tr>
<tr>
<td>Refractory cancer pain management</td>
<td>188.5</td>
<td>210.0</td>
<td>183.5</td>
</tr>
<tr>
<td>Education on narcotic opioids</td>
<td>133.8</td>
<td>129.6</td>
<td>127.7</td>
</tr>
<tr>
<td>Pressure dressing</td>
<td>184.6</td>
<td>179.6</td>
<td>156.5</td>
</tr>
<tr>
<td>Family education: psychosocial care</td>
<td>170.8</td>
<td>198.5</td>
<td>173.1</td>
</tr>
<tr>
<td>Family education: Group</td>
<td>133.8</td>
<td>196.2</td>
<td>183.8</td>
</tr>
<tr>
<td>Coordination of family conflict</td>
<td>149.6</td>
<td>242.3</td>
<td>226.9</td>
</tr>
<tr>
<td>Counselling for discharge planning</td>
<td>132.3</td>
<td>174.2</td>
<td>151.2</td>
</tr>
<tr>
<td>Counselling and education for preparation for death</td>
<td>168.5</td>
<td>255.4</td>
<td>239.2</td>
</tr>
<tr>
<td>Caring for patients in impending death</td>
<td>247.7</td>
<td>220.2</td>
<td>216.3</td>
</tr>
<tr>
<td></td>
<td>159.6</td>
<td>191.6</td>
<td>173.1</td>
</tr>
</tbody>
</table>

4 Discussion

An advanced nurse practitioner system was introduced to South Korea in 2003, and a master’s course and training began. However, Korea’s advanced nurse practitioner system has not seen development and seems somewhat stagnant. Problems such as unclear classified practices, no documentation for legal responsibilities and duties, and limited roles in advanced nursing practices were pointed out.

We classified 11 advanced hospice nursing practices to identify the role of hospice nurse practitioners. Their tasks focus primarily on the role of assessment, management, counselling and education related to the dying process of patients. And, we calculated the workload of each of the 11 practices. The workload for “Coordination of family conflict” was the highest.

In South Korea, to improve the current system, nurses must prove the effectiveness of advanced nursing care. In addition, the unclear, defined roles and inconsistent expectations of advanced nurse practitioners can result in role conflict and role overload and cause barriers to advanced nursing practices[5].
Therefore, it is necessary to clearly define the role of hospice nurse practitioners and identify their related practices. The results suggest that advanced hospice nursing practices are considered to be an alternative to improve the quality of life of the patient and the patient’s family in the dying process.

Acknowledgements. This work was supported by a National Research Foundation of Korea (NRF) grant funded by the Korea government (NRF-2011-0024586).

References