

*Assessment Difficulty and Educational Needs of Home Care Nurses Providing Medical Care for Cancer Patients in Japan: Examining the Viewpoints of Home Care Nurse Managers*

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**Abstract**

The primary cause of death in Japan is malignant tumors, and the increase in medical expenses is increasing social security costs. It is expected that home recuperation of cancer patients will increase in the future. Therefore, improving visiting nurses' practical skills is an urgent issue. This study aimed to clarify the assessment difficulty experienced by visiting nurses while providing medical care to cancer patients and to obtain suggestions for developing training programs for improving nursing practical skills. Semi-structured interviews were conducted with ten home care nurse managers from November to December 2017. Verbatim responses were collected and categorized using MAXQDA. Assessment difficulties were encountered during the following situations in medical care of cancer patients: "pain control" and "seeking safety and comfort in the occurrence of diverse symptoms caused by cancer recurrence, metastasis, and disease progression." Additionally, visiting nurses were managing methods to report physicians to support the patient's wishes, and coordinating with relevant organizations such as request a home call. According to the nurse managers, it is essential to ensure training opportunities for young and mid-career nurses, train nurses regarding the use of new medical equipment, conduct technical exercises on drug administration, and provide education on assessment techniques and medical viewpoints on respiration and circulation.

Keywords: nursing education, visiting nurse, cancer patient

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## Introduction

Malignant tumors account for the primary cause of death in Japan, and the resulting medical expenses are squeezing social security reserves. In addition, a reduction in the number of hospital beds has been shown, and it is expected that home care for cancer patients will increase in the future. Therefore, improving practical cancer nursing skills in visiting nurses who support home care is an essential task.

To this end, cooperation between medical care and nursing care is indispensable for promoting at-home care. The government promotes home healthcare and the construction of a comprehensive regional care system in order to respond to these issues not only in elderly nursing care but also in medical policy (Ministry of Health, Labour and Welfare, 2011). As legislation for home health care advances, the number of patients who need visiting nursing has increased and their needs are diversifying. Demand from cancer patients with high medical dependence is expected (Ministry of Health, Labour and Welfare, 2011).

However, the turnover rate of visiting nurses is 15% (2007), which is higher than the turnover rate of other nurses (Japanese Nursing Association, 2009). It has been reported that visiting nursing stations are being closed due to the high turnover of visiting nurses (The National Association for Visiting Nurse Service, 2017). The number of visiting nursing stations was 9,735 in 2016. Although the number of cases has increased, the target value of the country in 2004 has not yet been reached (The National Association for Visiting Nurse Service, 2017).

In a previous study (Yoshida & Kojo, 2015), “anxiety about care” has been extracted as a turnover factor for visiting nurses. Specifically, it was found that nurses feel a weight of responsibility in judging and carrying out care. A survey of visiting nurses found that holding full responsibility for assessment and care implementation, having a 24-hour phone number, and work during holidays and at night made their work difficult. (Ochiai & Gouma, 2015). Meanwhile, it has been reported that an increased sense of accomplishment and job satisfaction gives visiting nurses the will to continue (Nakano, 2008). It has been pointed out that training is necessary for raising visiting nurses’ job satisfaction (Tomioka et al , 2007).

Furthermore, Tokuoka, Hayasida, Tanaka, Kagawa, and Furugai (2016) investigated the learning needs of the visiting nurses and focused on the judgment of providing cancer nursing at home and a new therapeutic method. It was reported that it was desirable for the training plan to focus on the contents and implement them according to the nurses’ learning needs.

From the above, it was necessary to establish an opportunity to learn about judgment of care for the consolidation of visiting nurses, and to develop a training system that realizes growth and gives them satisfaction in their work. Simulation education has been carried out recently in medical and nursing education to provide sufficient skill training. Sakuyama, Okazaki, Nakamura, Komatsu, Shiobara, and Fukushima (2011) conducted auscultatory training using a respiratory simulator for visiting nurses, and reported the effectiveness of practical training. The need for further program development for visiting nursing is expected.

Therefore, an interview survey was conducted for managers of visiting nursing stations, and scenarios in which visiting nurses were unable to decide on the appropriate care for cancer patients were extracted. The purpose of this study was to clarify in what circumstances visiting nurses get lost in judgment and experience difficulty when providing medical care for cancer patients, and to gather suggestions for program development.

## **Methods**

### **Participants**

The participants were ten visiting nursing station managers who conduct visit nursing for cancer patients in Miyazaki prefecture. The reason for focusing on administrators was that they have much experience facing visiting nurses.

There were ten participants (female: average age 52.1 years (SD = 7.3)), the average years of visiting nurse experience was 11.5 years (SD = 5.9) (Table 1), the interview time was mean 52.3 minutes.

### **Procedures**

A random sampling method was used to select participants from visiting nursing stations in Miyazaki prefecture, in collaboration with Miyazaki University Medical School Hospital. The survey period was October to December 2017.

In the semi-structured interviews, participants were asked to answer the following questions. 1) In which scenarios do visiting nurses experience difficulty in caring for cancer patients?, 2) What kind of difficulties do you experience in advancing medical collaboration while caring for patients with cancer at home?, 3) The abilities that administrators require from visiting nurses. Data analysis used MAXQDA software.

## **Results**

### **Outline of research data**

The code obtained by data analysis was 74 codes. Assessment difficulties were encountered during the following situations in medical care of cancer patients: "Pain control" (Table 2), "Seeking safety and comfort in the occurrence of diverse symptoms caused by cancer recurrence, metastasis, and disease progression" (Table 3), "Difficulty in medical collaboration" (Table 4), and "Training opportunity needs" (Table 5).

**Table 1: Participants**

	Age	Experience of nurse	Visiting nurse experiences	Number of staff	Patient registration Mean/Month	Number of cancer patients/Years
A	53	13	20	11	50	5
B	38	3	13	5	25	3
C	56	16	17	10	68	13
D	49	10	13	6	35	8
E	52	8	14	6	27	4
F	62	21	17	10	38	2
G	44	18	5	12	70	5
H	50	26	3	8	40	4
I	59	30	6	9	90	5
J	58	15	7	6	39	21
Mean	52.1	16.0	11.5	8.3	48.2	7.0
SD	7.3	8.2	5.9	2.5	21.2	5.8

### **Scenarios where a visiting nurse experiences difficulty in caring for cancer patients**

The scenarios in which difficulties in assessment in medical care of cancer patients occur are “Pain control” and “Viewpoint of assessment of diverse symptoms associated with cancer recurrence, metastasis, and progression”.

#### **Pain control**

“Pain control” showed difficulty from four factors. In the process of pain control, visiting nurses faced patient factors such as 1) “Refusal to use medical narcotics with his/her intention”, “When there is a need to use analgesics exceeding the amount indicated by the doctor”, and “The patient's inability to understand how to use the opioid and respiratory medication can cause the patient to feel uncomfortable with the medication”. As family factors, they faced “Anxiety about the current situation of the families taking pain medications beyond the indicated amount” and “Family members have difficulty coping with delirium and managing narcotics”. Factors for the nurse were 3) “Anxiety of the nurses about support for nursing that discontinues conversation with the family by sedation” and “Judgment of pain and increased dyspnea and limit of comfort care”. Factors for the hospital and the doctor were 4) “It is difficult for the physicians and patients to arrive at a common judgement/decision regarding increasing the amount of narcotics” and “Not prescribing physician estimates when the patient's pain is strong and the medication is not effective” (Table 2).

**Table 2: Pain control**

<b>Patient factor</b>
<ul style="list-style-type: none"><li>• Refusal to use medical narcotics with his/her intention (want to be like himself/herself)</li><li>• When there is a need to use analgesics exceeding the amount indicated by the doctor</li><li>• The patient's inability to understand how to use the opioid and respiratory medication can cause the patient to feel uncomfortable with the medication.</li></ul>
<b>Family factor</b>
<ul style="list-style-type: none"><li>• Anxiety about the current situation of the families taking pain medications beyond the indicated amount</li><li>• When family members have difficulty coping with delirium and managing narcotics</li></ul>
<b>Nurse factor</b>
<ul style="list-style-type: none"><li>• Anxiety of the nurses about support for nursing that discontinues conversation with the family by sedation</li><li>• Judgment of pain and increased dyspnea and limit of comfort care</li></ul>
<b>Hospital / doctor factor</b>
<ul style="list-style-type: none"><li>• It is difficult for the physicians and patients to arrive at a common judgement/decision regarding increasing the amount of narcotics.</li><li>• Not prescribing physician estimates when the patient's pain is strong and the medication is not effective</li></ul>

**Viewpoint of assessment of diverse symptoms accompanying recurrence, metastasis, and progression of cancer**

“Viewpoint of assessment of diverse symptoms accompanying recurrence, metastasis, and progress of cancer” showed a sense of difficulty. In particular, cases of long-term home care recipients such as rheumatism and Parkinson's disease, which are non-cancer diseases, were shown to be cancer cases. There, visiting nurses experienced difficulty in dealing with safety and comfort in home care for various symptoms caused by metastasis and recurrence (Table 3).

**Table 3: Seeking safety and comfort in the occurrence of diverse symptoms caused by cancer recurrence, metastasis, and disease progression.**

<b>Assessments of diverse symptoms</b>
<ul style="list-style-type: none"><li>• Dealing with symptoms of metastasized cancer</li><li>• In addition to chronic illness, as cancer progresses, difficulty in searching for safety and comfort in various medical procedures</li><li>• When there is no coping method for patients' suffering and they recognize their limits as nurses</li><li>• Dealing with delirium</li></ul>

## Difficulty of visiting nurse in medical cooperation scenario

In this survey, “Difficulty in medical collaboration” was extracted. “Responding to different medical equipment for each clinic's doctor”, they had constructed a system to deal with immediate actions with medical manufacturers and were able to respond. On the other hand, cooperation with medical institutions was shown to result in a “Dilemma in conveying the patient's wishes to the doctor” and a “Dilemma of information recognition differing in continuous nursing” (Table 4).

**Table 4:** Difficulty in medical collaboration

<b>Difficulty in medical collaboration</b>
<ul style="list-style-type: none"><li>• Dilemma in conveying the patient's wishes to the doctor</li><li>• Dilemma of information recognition differing in continuous nursing</li></ul>
<b>Dealing with different medical devices used for patients in cooperative situations</b>
<ul style="list-style-type: none"><li>• Responding to different medical equipment for each clinic's doctor</li></ul>

## Education needs

As for the visiting nursing manager, “Educational Needs” has training opportunities as nursing skills training for young nurses and mid-career nurses, and training opportunities when introducing new medical equipment. The training content was “Technical exercises on drug administration”. In addition, there was an educational need to assess skills in improving respiration and circulation (Table 5).

**Table 5:** Educational Needs

<b>Training opportunity</b>
<ul style="list-style-type: none"><li>• Nursing skills training for young nurses</li><li>• Nursing skills training for mid-career nurses</li><li>• Training opportunities when introducing new medical equipment</li></ul>
<b>Training content</b>
<ul style="list-style-type: none"><li>• Technical exercises on drug administration</li><li>• Assess skills in improving respiration and circulation • Clinical reasoning</li></ul>

## Discussion

The purpose of this paper is to clarify 1) the difficulty that visiting nurses face, from the viewpoint of the administrator, in caring for cancer patients; and 2) suggestions for program development toward the improvement of visiting nurses' practical nursing skills. In pain control, four factors intertwined in a complicated way and created a difficult feeling for visiting nurses. Overdose of analgesics by a family member and the fear of the side effects of the medicine increases the anxiety of the nurse. Under such circumstances, the visiting nurse tries to collaborate with the medical institution in order to control the patient's pain, and repeatedly makes adjustments to reach an appropriate amount. Although the nurse tries to make adjustments to alleviate the pain of the patient, there were a case of re-hospitalization from the hope of the patient and the family, and it seems that the visiting nurse showed a sense of difficulty when dealing with pain control. Sugikoto, Koga, and

Nishigaki, (2009) reported that families who experience home visits cannot relieve pain, and point out that pain control is a major problem in home care. In fact, a survey found that the administration of a strong opioid analgesic within one week before death is 72% in palliative care wards (Sato, 2010), and 52% in home care (Hashimoto et al, 2015). In the report, it is stated that the patient experienced physical problems (pain, dyspnea, fatigue), and the family experienced mental problems (anxiety, depression, grief) as reasons for the termination of home care and the resulting hospitalization (Hashimoto et al, 2015) .

In other words, visiting nurses play a role as a bridge between patients, their families, and hospitals/physicians in situations where sufficient palliative care cannot be carried out, and have a role of controlling pain, but it has been shown that there is a problem in realizing this role.

Furthermore, in the current situation, the practice and research in palliative care for non-cancer diseases are delayed in Japan(Hirahara,2017). In addition, there are social factors such as an increase in households of elderly couples and dementia, and it is pointed out that there are living problems that cannot be dealt with adequately by merely considering palliative care concepts centered on symptomatic relief for cancer patients (Hanazato & Ashiya, 2017). For visiting nurses, it is considered necessary to develop the capacity to advance more precise cooperation. From the above, it is necessary to improve the ability of visiting nurses to practice nursing, improve the assessment ability of various symptoms, and foster smooth cooperation with medical institutions.

In medical cooperation, it is inferred that difficulty is encountered while visiting nurses are encouraging patients to follow the desires of carers and their families in their home life. Hashimoto et al. (2015) reported that the median number of days of home care is 38, and it can be seen that the time from the start of the care of the visiting nurse to the home visit is limited. Hisamatsu & Niwa (2011) stated a need to support swaying feelings and the anxiety of medical persons and families as the cancer terminal term changes. In addition, Fujikawa, Kobayashi, Hirasawa & Iiyoshi (2011) reported that it is necessary to discuss opinions with the attending physician, share information, respect the consciousness of medical personnel and families, talk about care, coordinate policies, and provide home terminal care. Even in the stories provided by managers in this study, measures to report to doctors and efforts to devise measures for timing were discussed. Therefore, it is necessary for visiting nurses to support the trembling feelings and anxiety of patients and their families in a limited time, foster the ability to agree on policies through exchanging opinions with the attending physician, and share information. Visiting nurses often visit alone, and it is presumed that there is little opportunity for experienced nurses to learn through model learning about the adjustment ability that veteran nurses demonstrate at the visit location. It is expected to position these skills as practical nursing skills for visiting nurses, to hold lectures in coordination with experienced visiting nurses, and to provide training through role play.

## **Conclusion**

From the above, it is clear that the education of visiting nurses is not merely an acquisition of techniques for handling medical equipment, but rather that an assessment-type training is necessary. The development of an educational program is anticipated in home health care in an aging society, assuming that it will be suffering from duplicated diseases in addition to being accompanied by chronic illness, and that home care will be prevalent. Specifically, in order to improve the practical nursing abilities of visiting nurses, the assessment of overlapping symptoms such as adjusting respiration/circulation for safety and comfort in situations where cancer progresses, and assumed various medical treatments, training is considered necessary. In addition, because there is an educational need for a medical perspective, it is necessary to incorporate education on medical thinking methods such as clinical reasoning into training.

Particularly in collaboration with medical institutions, it is possible to propose lectures on cooperative skills by experienced visiting nurses and to develop training using role play. Furthermore, it is thought that technology training that assesses home care recipients and appropriately reports them to doctors will lead to smooth medical collaboration and help control pain. It is expected that programs such as education of indices judging that hospitalization is necessary and program simulation education linked to medical institutions reporting them will be developed.

## **Limitations**

This research was an interview survey targeting administrators and reflects the perspective of the administrator. In the future, it will be necessary to investigate the challenges faced by visiting nurses. Also, it is necessary to develop programs and to try repeated trials in accordance with the educational needs of visiting nurses.

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## References

- Fujikawa, A., Kobayashi, K., Hirasawa, N., & Iiyoshi, Y. (2011). Study on Medical Collaboration System of Visiting Nursing Station Enabling Terminal Care at Home. *Journal of Japan Academy of Home Care*, 14, (2), 76-82.
- Hanazato, Y., & Ashiya, T. (2017). Research on Conditions of End-of-Life Care for Elderly Recipients at Home. *The Japanese Journal of Clinical Research on Death and Dying*, 40, 175-178.
- Hashimoto, K., Sato, K., Uchiyama, J., Demizu, A., Fujimoto, H., Morii, M., ... Suzuki, M. (2015). Current Home Palliative Care for Terminally Ill Cancer Patients in Japan. *Palliative Care Research*, 10 (1), 153-61.
- Hirahara, S. (2013). Higan shikkann no zaitakuiyou kannwa kea. Zaitakuiyou hennsyu iinnkai hen : Zaitakuiyou Tekisuto. *Zaitakuiyo-yuumizaidan*. 138-142.
- Hisamatsu, M., & Niwa, S. (2011). Support Factors of Coping with Anxiety in Families of Patients with Terminal Cancer. *Journal of Japan Academy of Nursing Science*, 31, (1), 58-67.
- Japanese Nursing Association (2009). Health promotion for the Elderly 2008 : Homonkango jigyoosyosuu no genshoyouin no bunseki oyobi taiousaku noarikata ni kansuru cyousajigyoo houkokusho, 2009.
- Ministry of Health, Labour and Welfare, Chuouyukaihokenniryookyougikai soukai (vol. 205) Houmonkangosiryoo (2011). <http://www.mhlw.go.jp/stf/shingi/2r9852000001uo3f-att/2r9852000001uo71.pdf> (July 12,2017)
- Nakano, Y. (2008). The relation between retention and job satisfaction of visiting nurses. *UH CNAS, RINCPC Bulletin*, 15, 43-59.
- Ochiai, Y., & Gouma, E. (2015). Factors Related to the Intention to Keep Working for at Least Three More Years among Visiting Nurses. *Journal of Japan Academy of Home Care*. 19, (1),82-89.
- Sakuyama, T., Okazaki, F., Nakamura, M., Komatsu, K., Shiobara, K., & Fukushima, M. (2011). Zaitakuiyo wo saporto surutameni daigakuga dekirukoto. *Japanese Journal of Cancer and Chemotherapy*, 38, (1), 29-33.
- Sato, K. (2010) Kanwacare byouto de teikyousareta syuumatuki ganiryoo no jittai-Tashisetu sinryoukiroku cyousa, *The Japan Hospice and Palliative Care Evaluation Study*, Japan Hospice/Palliative Care Foundation, 1 .105-112. [https://www.hospat.org/assets/templates/hospat/pdf/j-hope/J-HOPE\\_all.pdf](https://www.hospat.org/assets/templates/hospat/pdf/j-hope/J-HOPE_all.pdf).( March 22,2018)
- Sugikoto, S., Koga, T., & Nishigaki, C. (2009). Problems of Home Medical Treatment in Terminal Medical Care. *Bulletin of Social Medicine*, 27(1), 9-16.

The National Association for Visiting Nurse Service (2017). Survey results of visiting nursing stations 2017. <https://www.zenhokan.or.jp/pdf/new/h29-research.pdf>. (July 12,2017)

Tokuoka, Y., Hayasida, Y., Tanaka, K., Kagawa, Y., & Furugai, M. (2016). Difficulties and Learning Needs of Home Care Nurses Caring for Advanced-Recurrent Treatment Stage Cancer Patients and Their Families, *Journal of Japanese Society of Cancer Nursing*. 30, (1), 45-53.

Tomioka,S., Ishizaw,M., Ohtake,M., Akama, A., Sato, C., Suzuki,I,... Kanoya ,Y. (2007). Factors Related to Job Satisfaction of Visiting Nurses. *Journal of Japan Academy of Home Care*. 11, (1), 43-51.

Yoshida, M., & Kojoyo, S. (2015). Aken houmonnkanngosi no risyokuishiki no gennjyo to eikyoyouuin. *The Bulletin of Niimi College*, 36, 113-117.

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