学 位 論 文 の 要 旨

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学 位 論 文 名　Characteristics of Geriatric Health Service Facilities Designated as Sites of Death

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論 文 内 容 の 要 旨

INTRODUCTION

There are many deaths occurring among the elderly population in Japan. Most elderly persons die after undergoing prolonged medical and nursing care. Elderly persons receiving facilities services can have possibilities to face death in facilities, not in hospitals.

Geriatric Health Service Facilities (GHSFs) offer physical therapy to elderly people, to support their everyday living functions and provide other assistance, so that they can resume independent living at home. The role played by GHSFs is that of "intermediate" facilities, that is, facilities with multiple functions, including functioning as hospitals or other facilities and home, or providing in-home nursing care. Additionally, the Japanese government established the nursing care benefit for site-of-death care at GHSFs in 2009. They also play a role in end-of-life care. However, the physical signs first noticed by staff at the end-of-life period are not well known in GHSFs. Most previous studies on end-of-life care in GHSFs targeted facilities designated as sites of death only. There are few studies involving a comparison of GHSFs designated as sites of death and those not designated.

The aim of our study is to clarify the characteristics of and related factors in GHSFs, including the end-of-life physical signs noticed by staff at these facilities, through a nationwide survey in Japan.

MATERIALS AND METHODS

The subjects were 3,971 GHSFs registered on the Long-term Care Insurance Services Informational Publication System, adopted by all the prefectures in Japan, as at January 2015.

We administered a questionnaire to 3,971 GHSFs. Of the 1,032 respondents, 7 did not give informed consent and 171 did not give the complete data needed for analysis, such as missing and invalid responses. Finally, 854 eligible responses remained in the study: 21.5% (854/3971) of all subjects and 82.8% (854/1032) of the respondents.

The contents of the survey included the characteristics of the facilities [presence of branches of medical institutions (hospital, clinic with beds, and clinic without beds), provision of other services to elderly persons, the number of beds in facilities, the average care-need level, the average home return rate, and location of facilities]. We also asked about the procedures relating to the site of death in the GHSFs (whether the facility has a basic policy on end-of-life care or not, whether there is a preference for individuals to have a documented living will or not). The facilities were asked about the number of residents who had died therein within the past one year (from April 2013 to March 2014). Then, we obtained information on physical signs, which most staff members noticed first among end-of-life residents — reduced oral intake, sleepiness during daytime, less vigor, oliguria, dyspnea, edema, and complaints of pain.

GHSFs designated as sites of death were defined as facilities in which at least one death had occurred within the past one year. Student t-tests and χ^2 tests were used to compare GHSFs designated as sites of death with those not designated. A multiple logistic regression analysis was used to assess the contribution of each independent variable, including characteristics and physical signs, toward GHSFs designated as sites of death. All probability values were two-tailed and all confidence intervals were estimated at the 95% level.

All the procedures of this study were reviewed and approved by the Institution Review Board of Shimane University Faculty of Medicine.

RESULTS AND DISCUSSION

Both basic policies on end-of-life care and documented preferences in the form of a living will were more common in GHSFs designated as sites of death. The average level of care needs in GHSFs designated as sites of death was higher than that of those not designated (the average level of care needs 3.3 ± 0.4 vs 3.2 ± 0.4). The average number of deaths in GHSFs designated as sites of death was 9.1 ± 8.5. There were fewer standard types of GHSFs under the notification system in the long-term care insurance, in GHSFs designated as sites of death than in those not designated. There were many more clinics without beds, which were either primary or affiliate institutes of medical care, in GHSFs designated as sites of death than in those not designated. The GHSFs designated as sites of death were slightly less independent of medical institutions than were those not designated.

On the physical signs that most staff members noticed first at the end-of-life period, the proportions of "reduced oral intake", "sleepiness during daytime", and "less vigor" were higher in GHSFs designated as sites of death than among those not designated, and "reduced oral intake" and "sleepiness during daytime" had statistically significance. On the other hand, the proportions of "oliguria", "dyspnea", "edema", and "complaints of pain" were lower in GHSFs

designated as sites of death; statistical significance was obtained for "dyspnea" and "complaints of pain."

Using multiple logistic regression analysis, both basic policies and preferences documented at end-of-life care facilities were positively associated with GHSFs designated as sites of death. There were fewer "complaints of pain", as a physical sign first noticed by most staff members at the end-of-life period, in GHSFs designated as sites of death. Though none of the relationships reached statistical significance, we also observed that GHSFs designated as sites of death had positive relationships with "clinic as primary medical institutions", "average care-need level", "sleepiness during daytime", and "reduced oral intake", which most staff members noticed at the end-of-life period among residents.

The establishment of a basic policy regarding sites of death in GHSFs helps staff members realize that end-of-life care forms part of their duties in the facilities and facilitates attitudes geared towards supporting elderly persons. The role of documented preferences, as communication tools, is to promote decision making regarding the drawing of living wills by both patients and their families. Our results may suggest that the documentation of preferences enables the elderly persons, their families, and staff at the facilities to prepare for the elderly's deaths and for the remainder of their lives. The GHSFs have multiple functions in their support of elderly persons during provision of the long-term care. The GHSFs designated as sites of death identified reduced activity levels and behaviors, as opposed to vital signs, as early end-of-life signs.

CONCLUSION

The GHSFs designated as sites of death had more basic policies relating to end-of-life care facilities, as well as documented preferences in the form of a living will than those not designates. These GHSFs were also less likely to identify pain as a first end-of-life physical sign. We suggest that GHSFs identify earlier symptoms, such as reduced oral intake and sleepiness during daytime, in the end-of-life period, by improving end-of-life care through the implementation of basic policies and those relating to the documentation of preferences. We hope that the strengthening of intermediate facilities would render the role of GHSFs important, in the provision of end-of-life care to elderly persons in Japan.