

2019 Doctoral Dissertation (Abstract)

Empirical Studies of the Effectiveness of Home Care in Japan

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1. Introduction

Japan has become a super-aged society, where many people wish to stay at home until the end of their lives. To realize their wishes, the construction of a comprehensive community care system, including the promotion of home care, has been addressed. However, the current situation still allows many people to be hospitalized when they reach end of life. Only a few studies have been conducted on home care and there is little evidence that suggests its effectiveness, which can lead to a lack of public trust. Thus, there is an urgent need to assess the effectiveness of home care, and to make it widely known to the public. The aim of these studies is to contribute scientific evidence regarding the effectiveness of home care for older adults.

2. Studies

This doctoral dissertation is consists of the following two studies.

2.1 Study 1

Preferred and Actual Place of Living among Cancer Patients Who Received Home Care

- Considering Changes in Preference While Receiving Home Care -

Arai Y, et al. J Jpn Prim Care Assoc 2019 [in Japanese]

Objectives: This study examined whether cancer patients who received home care lived in the places they and their families preferred, and whether their preferences changed while receiving home care.

Methods: We conducted a medical record survey of 111 cancer patients who received home care provided by a clinic in Japan, and examined the patients' and their families' preferred places to live in the case of their condition deteriorate (the patients and their families were asked when they began to receive home care, and whenever their and their families' conditions changed), and the actual places where the patients lived out their lives.

Results: Among those who preferred home at the beginning of receiving home care, 95.6% of patients and 96.8% of families preferred home in the last survey period. Of those who did not prefer home at the beginning, 87.9% of patients and 84.8% of families preferred home by the last survey period. For 97.4% of patients and 97.2% of families, the actual places where the patients lived out their lives were consistent with their preferred places.

Conclusion: We found that cancer patients receiving home care provided by the clinic and their families who preferred home from the beginning often still preferred home until the end of their lives, and that those who did not prefer home at the beginning often preferred home by the last survey period. Thus, most of the patients lived out their lives in the places they and their families preferred.

2.2 Study 2

Effectiveness of Home Care for Fever Treatment in Older Adults Compared with Hospitalized Care

A retrospective case-control study and a prospective case-control study were carried out in this study.

1) Retrospective Case-control Study

Objectives: This study examined whether the outcome of fever treatment through home care differ from those for hospitalized care for older people who regularly receive home care in Japan.

Methods: A retrospective survey of medical-record-based data for 679 older people who regularly received home care provided by a clinic in Japan. From these data, 61 cases (21 who received hospitalized care and 40 who received home care) were selected for analysis through a matching process. We compared the two groups in terms of mortality rate at 90 days after fever onset, and in regard to changes in respective ranks for “Degree of Independent Living for Elderly with Disability (DILE-disability)” and “Degree of Independent Living for Elderly with Dementia (DILE-dementia)” from immediately before fever onset to 90 days after fever onset.

Results: The mortality rate tended to be higher in the hospitalized group than in the home-care group (33% vs 13%, respectively, $p = 0.05$). The hospitalized group also had a higher proportion of patients with a worsened DILE-disability (43% vs 23%, respectively, $p = 0.16$), and a significantly higher proportion of patients with a worsened DILE-dementia (29% vs 6%, respectively, $p = 0.03$).

Conclusion: Our findings suggest that home care is more effective than hospitalized care for treating fever in older people who regularly receive home care, as it leads to lower mortality and better maintenance of Activities-of-Daily-Living capabilities.

2) Prospective Case-control Study

Objectives: This study examined whether the outcome of fever treatment through home care differ from those for hospitalized care for older people who regularly receive home care in Japan.

Methods: A multicenter, prospective registry study was conducted in Japan involved 10 medical institution which provided home care. Among 151 cases of acute fever, 36

cases (12 who received hospitalized care and 24 who received home care) were selected for analysis through a matching process. The mortality rate at 90 days after fever onset, changes in DILE-disability and DILE-dementia from just before to 90 days after fever onset were compared between two groups.

Results: The mortality rate tended to be higher in the hospitalized group than in the home-care group (33% vs 13%, $p = 0.05$). Degree of Independent Living for Elderly with Disability (43% vs 23%, $p = 0.16$) Degree of Independent Living for Elderly with Dementia (29% vs 6%, respectively, $p = 0.03$).

The mortality rate was significantly higher in the hospitalized group than in the home care group (33% vs 0%, respectively, $p < 0.01$). The hospitalized group also had a higher proportion of patients with a worsened DILE-disability (50% vs 25%, respectively, $p = 0.19$), and a significantly higher proportion of patients with a worsened DILE-dementia (38% vs 4%, respectively, $p = 0.01$).

Conclusion: This result is consistent with that of previous retrospective case-control study. This study also suggests that home care is more effective than hospitalized care for treating fever in older people who regularly receive home care.

3. Discussion

Study 1 suggested the effectiveness of home care, and that it meets the expectations of patients and their families and helps them stay at home until the end of their lives. It was thought that even for patients and families who had chosen home care, many of them were not able to imagine the actual situation beforehand. They often became aware of its effectiveness while receiving it. For this reason, it is necessary to provide the public with information about the effectiveness of home care.

Study 2 also suggested the effectiveness of home care for fever treatment in older adults, and that those who continued receiving home care had a more favorable outcome than those who received hospitalized care. In Japan, there is a perception that the prognosis is better for patients who receive treatment in a hospital rather than at home. However, this study suggests that it may be a misperception for older adults with reduced capability for the Activities of Daily Living, which is a novel finding.