Regional Characteristics of Establishment Process and Location of Day Service Facilities for the Elderly

Case Study on Yamaguchi Prefecture by Using the Local Government Units at 1950

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Abstract

This paper investigates the establishment process of day care facility for the elderly and indicates the subject of facilities supply for the future, by the survey on the location of facilities in each municipality, the establishment time and the establishment organization of day care facility. The results are as follows; 1) The municipalities in Yamaguchi Prefecture are classified into the 5 management type by the above-mentioned survey. 2) The facilities by for-profit organizations and social welfare council are increasing in the whole city after introducing nursing care insurance. 3) There were municipalities that facility improvement progresses for the period of municipal merger. Suo-oshima town is representative, and social welfare corporation and social welfare council manage facilities in the old town unit. As mentioned above, in Yamaguchi Prefecture facility improvement is progressing after introducing nursing care insurance, but there are regional disparities of day care facility for the elderly.

Keywords: Day Service; Settlement Form; Location; Municipal Merger

1 Introduction

Reform of social welfare system has been practiced from the late 1980s, because a rapid advance of the aging society was expected. Moreover, nursing care insurance is introduced in 2000, and the number of facilities for the elderly people increased, such as a small-scale day care facility with a capacity of ten and a home help service center. In particular, after introduction of insurance, many corporations for profit have entered into the nursing-care-insurance enterprise, and are managing 9800 facilities equivalent to 40percent of the whole in 2009. Besides a corporation for profit, new entry of a medical corporation and a NPO is also increasing. As stated previously, since the social environment which surrounds a day care facility is changing drastically in ten years. It is a contemporary issue to investigate and analysis the feature of facility supply.

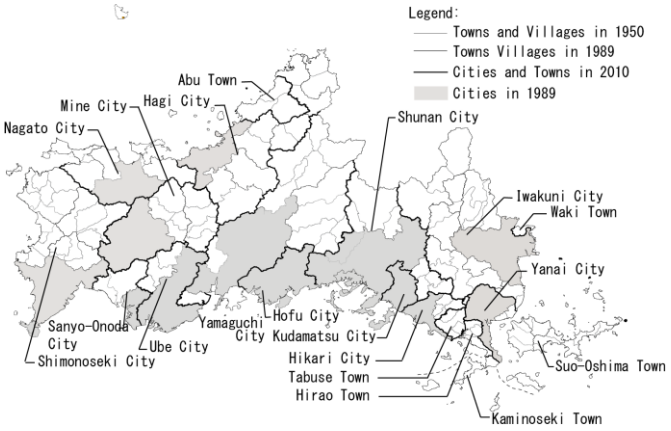

Fig.1. Municipal boundary of Yamaguchi Prefecture

2 Purpose and Method

This paper investigates the establishment process

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Table.2. The index of average

	The number of municipalities	Old city			Old town and village						Old city, town and village		
					Maintenace rate			The number of facilities					
		The number of facilities (1999)	The number of facilities (2009)	Ratio of increase (times)	Maintenace ratio (1999) (%)	Rising ratio (%)	Maintenace ratio (2009) (%)	The number of facilities (1999)	The number of facilities (2009)	Ratio of increase (times)	The number of facilities (1999)	The number of facilities (2009)	Ratio of increase (times)
Type A	5	4.2	39.2	11.4	29.2	35.0	64.3	3.4	15.4	4.2	7.6	54.6	7.0
Type B	4	0.8	13.8	12.5	21.6	73.9	95.5	1.3	4.3	5.0	2.0	18.0	7.7
Type C	4	2.8	11.8	4.1	22.9	35.4	58.4	3.0	5.5	4.0	3.5	14.5	4.3
Average of cities		2.7	22.9	8.9	25.3	49.2	74.5	2.3	9.5	4.8	4.6	31.0	7.0
Type D	1				36.4	45.5	81.9	4.0	13.0	3.3	4.0	13.0	3.3
Type E	5				31.7	53.3	87.5	0.6	5.0	3.3	0.6	3.4	3.3
Average of towns					32.5	52.0	84.5	1.2	3.4	3.3	1.2	3.4	3.3

notes: Type A shows a type with high increase ratio
Type B shows a type with high increase ratio and rising ratio
Type C shows a type with low increase ratio
Type D shows a type with high increase ratio and existence of municipal merger
Type E shows a type with high increase ratio and nonexistence of municipal merger

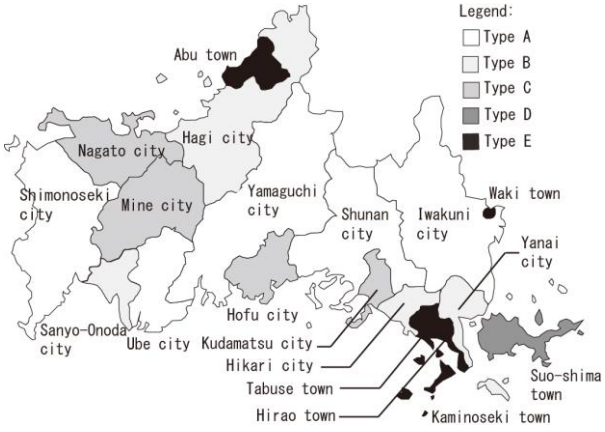

Fig.2. Distribution of municipality classification

Table.3. Change of the number of facilities in each old city and town, and maintenance ratio

		Old city			Old town and village							Old city, town and village		
						Maintenace rate			The number of facilities					
		The number of facilities (1999)	The number of facilities (2009)	Ratio of increase (times)	The number of towns and villages (1950)	Maintenace ratio (1999) (%)	Rising ratio (%)	Maintenace ratio (2009) (%)	The number of facilities (1999)	The number of facilities (2009)	Ratio of increase (times)	The number of facilities (1999)	The number of facilities (2009)	Ratio of increase (times)
Type A	Yamaguchi city	4	35	8.8	12	33.3	33.3	66.7	4	20	5.0	8	55	6.9
	Iwakuni city	3	24	8.0	16	31.3	25.0	56.3	5	19	3.8	8	43	5.4
	Shimonoseki city	8	71	8.9	20	15.0	50.0	65.0	3	24	8.0	11	95	8.6
	Shunan city	1	20	20.0	9	33.3	33.3	66.7	4	8	2.0	5	28	5.6
	Ube city	5	46	9.2	3	33.3	33.3	66.7	1	6	6.0	6	52	8.7
	Average			11.4		29.2	35.0	64.3			4.2			7.0
Type B	Hikari city	1	14	14.0	1	0.0	100.0	100.0	0	1		1	15	15.0
	Sanyo-onoda city	2	22	11.0	2	50.0	50.0	100.0	1	6	8.0	3	28	10.3
	Hagi city	0	11		11	36.4	45.5	81.8	4	9	2.3	4	20	5.0
	Yanai city	0	8		1	0.0	100.0	100.0	0	1		0	9	
	Average			12.5		21.6	73.9	95.5			5.0			7.7
Type C	Mine city	2	3	1.5	8	12.5	37.5	50.0	1	5	5.0	3	8	2.7
	Nagato city	1	4	4.0	6	33.3	33.3	66.7	2	6	3.0	3	10	3.3
	Hofu city (un-merger)	6	27	4.5	0							6	27	4.5
	Kudamatsu city (un-merger)	2	13	6.5	0							2	13	6.5
	Average			4.1		22.9	35.4	58.4			4.0			4.3
Average of cities				8.9		25.3	49.2	74.5			4.8			7.0
Type D	Suo-oshima town				11	36.4	45.5	81.9	4	13	3.3	4	13	3.3
Type E	Tabuse town				4	25.0	50.0	75.0	1	5	5.0	1	5	5.0
	Abu town				3	33.3	66.7	100.0	1	4	4.0	1	4	4.0
	Kaminoseki town				2	0.0	50.0	50.0	0	1		0	1	
	Hirao town				4	0.0	100.0	100.0	0	6		0	6	
	Waki town				1	100.0	0.0	100.0	1	1	1.0	1	1	1.0
	Average					31.7	53.3	87.5			3.3			3.3
Average of towns						32.5	52.0	84.5			3.3			3.3

of day care facility for the elderly and indicates its characteristic, by the survey on the location of facilities in each municipality, the establishment time and the establishment organization of it before and after municipal merger.

Statistics analysis was adopted as the method of research and the used data was 1) Insurance Information Service Guide of Yamaguchi Prefecture / Database of Service Establishment / Day Care (Elderly Citizens' Welfare Division in Yamaguchi Prefecture), 2) Result of National Census (2000, 2005, 2010).

3 Establishment process and pattern

3.1 Classification of the municipalities

Three indices classify the old cities into three types. In addition, towns and villages are classified into two types according to the existence or nonexistence of municipal merger. Therefore, all the municipalities of Yamaguchi Prefecture are classified into five types as indicated in Table 1, and as shown in Fig. 2, they are located. The index used for analysis is following three; 1) increase ratio of day care facility in old cities (1999-2009), 2) maintenance ratio of facility in old towns and

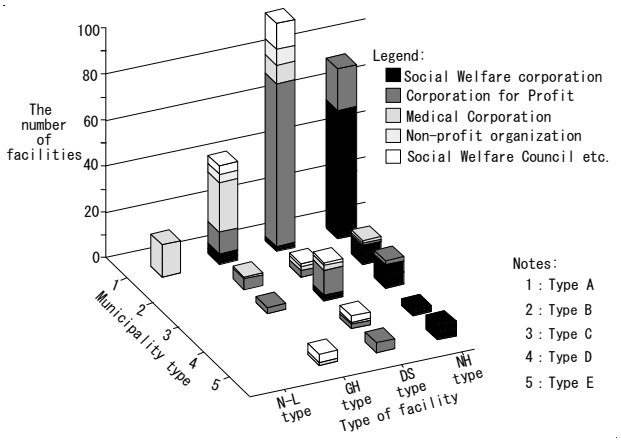

Fig.3. Relationship of business form and municipal type

villages (1999), 3) rising ratio in old towns and villages (1999-2009). In this paper, maintenance ratio is defined as the value which divided the number of municipalities with a facility into the total number of municipalities, and rising ratio is defined as the value which subtracted the maintenance ratio in 1999 from the maintenance ratio in 2009.

Type A is a type with high increase ratio and corresponds to five municipalities. Type B is a type with high increase ratio and rising ratio and corresponds to four municipalities. Type C is a type with low increase ratio and corresponds to four municipalities. Type D is a type with high increase ratio and existence of municipal merger, and corresponds to one municipality. Type E is a type with high increase ratio and nonexistence of municipal merger, and corresponds to five municipalities.

3.2 Characteristics of municipal type

It is the feature of Type A except Ube city that the city which merged in many towns and villages is most (Table 3). The average value of the increase ratio of Type A is 11.4 and exceeds the whole average of cities. On the other hand, although there are many facilities in the old rural district of Type A, the maintenance ratio of type A is less than the whole average of cities.

In Type B, the city except Hagi city has merged with two or less rural towns and villages. The average value of the increase ratio of Type B is 12.5 and higher than Type A. Moreover, since the rising ratio in old towns and villages (1999-2009) is the highest value of all the types, facility supply of Type B is progressing impartially in the old cities and the old rural districts (Table 3).

Two Cities which have not merged, such as Hofu city and Kudamatsu city, are included in Type C. The average value of the increase ratio of Type C is 4.1 and lowest in all the types. In addition, the rising ratio of Type C is the low value similar to Type A. For that reason, facility supply of Type C is not progressing in both the old city and the old rural district.

Type D is only Suo-oshima town and has merged with the surrounding old towns and villages. Type E is towns which have not merged in the 2000s. Both Type D and Type E have the high maintenance ratio in 2009, so the rising ratio of the towns is higher than the old rural districts merged by the city. However, it seems that the maintenance ratio of Type E becomes high by the small number of facility supply since there are few old towns and villages of Type E in 1950.

3.3 Facility management type in each municipal type

Relationship between municipal type and facility management type shows in Figure 3. Management types are defined as follows; 1) NH type is a type of a day care facility with nursing home, 2) DS type is a type of an independent day care facility or a day care facility with home-visit nursing service, 3) GH type is a type of a day care facility with group home, 4) W-F type is a type of a day care facility with long-term care ward or long-term care facility.

The city classified into Type A is a major urban area in Yamaguchi Prefecture facing Setonaikai, and its size of population is larger than other types. Therefore, compared with them, the absolute number of facilities in Type A is extremely large. DS type which a corporation for profit manages is as the most numerous as 93 facilities, and NH type which a social welfare corporation manages is numerous to the second in 86 facilities. Moreover, there is W-F type which a medical corporation manages only in Type A. It seems that the corporation for profit and medical corporation who think business profitability as important have advanced into Type A since there are many elderly populations.

In type B, NH type managed by a social welfare

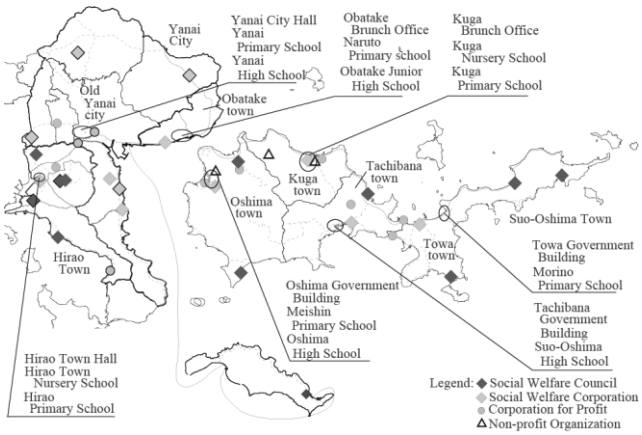

Fig.4. Facility Location of Yanai city, Hirao town and Suo-Oshima town

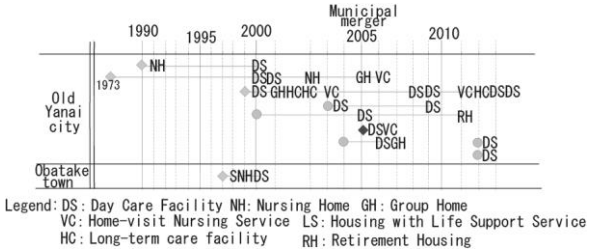

Fig.5. Establishment process of Yanai city

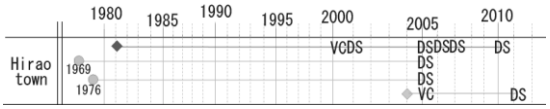

Fig.6. Establishment process of Hirao town

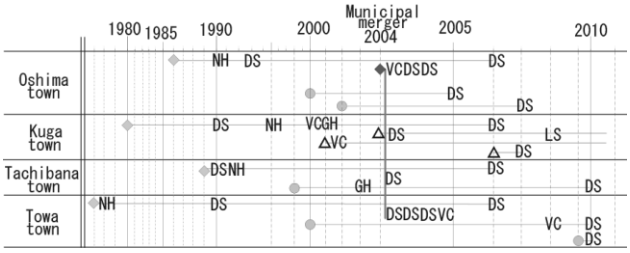

Fig.7. Establishment process of Suo-Oshima town

corporation is as the most numerous as 35 facilities, and DS type managed by corporation for profit is numerous to the second in 17 facilities. Most of GH type is established by Medical Corporation. It seems that the reason which the rising ratio of Type B has improved is because a nursing home in old towns and villages installed a day care facility.

In Type C, DS type managed by a corporation for profit is as the most numerous as 25 facilities, NH type managed by a social welfare corporation is numerous to the second in 18 facilities. This is the same tendency as Type A.

The town classified into Type D and Type E is a rural district, and its size of population is small. Therefore, compared with Type A, the absolute number of facilities in Type D and Type E is small. It is characteristic in these types that a social welfare corporation and a social welfare council play an important role in facility management, and there is almost no advance of a medical corporation and a corporation for profit.

4 Case study of characteristic municipality

4.1 Yanai city (Type A)

In old Yanai city, all day care facilities were established after 2000, but a nursing home had been established by social welfare corporation before 1999 (Fig.5). In 2000, 4 day care facilities, one group home and one long-term care facility were established by social welfare corporation, and one day care facility and a home-visit nursing service were established by a social welfare council in 2005 after a merger. After that, facility development is progressing in old city by the advance of a corporation for profit and the business expansion of a social welfare council.

In old Obatake town, a nursing home with a day care facility was established by 2000, but a facility is not developed after it.

4.2 Hirao town (Type E)

In Hirao town, there was no facility before 2000 (Fig.7). Facility establishment was progressing quickly after introduction of nursing-care-insurance, and a social welfare council established one day care facility with home-visit service in 2000. After that, a corporation for profit and a social welfare corporation have entered into facility management, and facilities are equally located in Hirao town (Fig.4). Moreover, there is no facility in which elderly people live, such as a nursing home.

4.3 Suo-Oshima town (Type D)

In Suo-Oshima town, one nursing home with a day care facility was established by a social welfare corporation in each old town before a merger (Fig.6). In 2004, a social welfare council was also unified at the same time with the merger of old towns and supplied a facility of DS Type in each old town, and facility improvement of the old town

unit was progressing.

After that, since a corporation for profit and a NPO have entered into facility management, facility supply increased greatly.

5 Conclusions

(1) Three indices classify the old cities into three types. In addition, towns are classified into two types. Therefore, all the municipalities of Yamaguchi Prefecture are classified into five types. In Type A, while the increase ratio is large in the old city, the rising ratio is small in the old towns and villages. In Type B, Both of the increase ratio and the rising ratio are the high value, and facility supply is progressing equally. Thus, there is regional disparity.

(2)In Type A and C, DS type managed by a corporation for profit, is increasing. In Type B, NH type managed by a social welfare corporation is increasing. A social welfare council established facilities in the towns.

(3)In Yanai city, a social welfare corporation established facilities in the old city after a merger. In Suo-Oshima town, a social welfare council established facilities in the period of the merger. In Hirao town where there was not a merger, a social welfare council established facilities after 2000. From the above, the characteristics of facility supply are seen in each municipality.

As mentioned above, although facility supply in whole Yamaguchi Prefecture progressed drastically after introducing nursing care insurance and municipal merger, there are regional disparities among municipal types. It is thought that an advance factor of a corporation for profit is a size of elderly population because it becomes easy to gain many users and profit. On the other hand, in order that public sectors, such as a social welfare council, a social welfare corporation and a municipality, play a key role for facility supply in the depopulated area where a size of elderly population is small and an advance of a corporation for profit is difficult, it is necessary to pay attention to the welfare policy of each municipality.

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