

Original Article

Comparison of Quality of Life and Simple Depression Scale on two islands (Mishima and Ohshima*)

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Abstract

Introduction

The aim of this study was to investigate whether the characteristics of the quality of life (QOL) and the simple depression scale (SDS) differ between two islands in Japan, Mishima and Ohshima.

Methods

Using a medical checkup in 2005 at clinics in Mishima and Ohshima, we investigated SF-8 and SDS after having obtained agreement from the residents. The number of individuals who answered all SF-8 questions was 307 (Mishima clinic: 204, Ohshima clinic: 103). The mean age of the Mishima and Ohshima respondents was 69.4 and 69.9 years, respectively. The number of individuals who answered all SDS questions was 245 (Mishima clinic: 144, Ohshima clinic: 101). The mean age of the men and women at both clinics combined was 69.5 and 69.9 years, respectively. We divided the SF-8 and SDS replies by age and gender.

Results

Overall, QOL in Ohshima was higher and that of SDS was lower; however, men did not show any difference, while the difference among women was pronounced. Elderly women in Ohshima had higher QOL scores. Although women in Ohshima had lower SDS scores overall, those of younger women in Ohshima were higher.

Discussion

Women generally shouldered more of the burden than men. We considered that older women in Mishima shouldered the burden in many two-person families and that younger women in Ohshima shouldered the burden in many big families. Based on this tendency, it seems that we must promote health care and medical activities in the future with a focus on support for women.

(Key words: QOL, SF-8, SDS, island)

Introduction

There are many reports about health-related Quality of Life (QOL) and depressive tendency screenings of rural residents^{1 2 3 4}. The characteristics of each area differ by region. We considered the characteristics and their tendencies in an attempt to promote health care and medical activities. There have

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been reports comparing multiple rural areas⁵, rural and urban areas in the same locality^{6 7 8 9}, and foreign countries¹⁰. Aging, educational level, low income, and limited public services and social networks are common factors of low QOL and high levels of depressive tendencies. There have been no reports comparing the inhabitants of islands, and it is unclear whether the characteristics differ between relatively close islands. In this study, we compared responses to the SF-8¹¹ and Simple Depression Scale (SDS) questionnaires on two islands, and differences in the characteristics were clarified.

Subjects and Methods

1. Location and background

Mishima is an island about 44 km off the coast of mainland Japan, its circumference is about 24.3 km, its area is 7.73 km², its population is 1256 people (in September 2005), and the percentage of residents over the age of 65 is 37.7%. Ohshima is an island about 9 km off the coast of mainland Japan, its circumference is about 8.5 km, its area is 3.00 km², its population is 955 people (in September 2005), and the percentage of residents over the age of 65 is 32.0%. Currently, the population of Mishima is larger than Ohshima; however, the reduction rate of the population in Mishima is much greater than Ohshima, and the population of Ohshima may exceed that of Mishima within several years. Because Mishima is farther from the mainland and there is little choice but to become a fisherman, the younger generation leaves Mishima in search of other work. Although the situation is similar, Ohshima is nearer to the mainland and islanders can commute to work every day. As a result, the younger generation stays on the island.

2. Subjects

A medical checkup of residents over 40 years old is performed in Hagi City for three months (from August to October) every year. We surveyed residents who had their medical checkup in 2005 at Mishima or Ohshima clinic. We obtained written agreement from each subject after explaining the purpose of this survey and that no disadvantages would occur if the subject chose not to participate. The number of individuals who answered all SF-8 questions was 307 (Mishima clinic 204, men 70, women 134; Ohshima clinic 103, men 32, women 71). The mean ages of the Mishima men and women and the Ohshima men and women were 70.2, 68.9, 67.3, and 70.3 years, respectively. The number of individuals who answered all SDS questions was 245 (Mishima clinic 144, men 45, women 99; Ohshima clinic 101, men 31, women 70). The mean ages of the Mishima men and women and the Ohshima men and women were 69.9, 69.4, 67.2, and 70.3 years, respectively (Tables 1 and 2). If there was no answer to a question on SF-8 or SDS, the question was not included in this study. The Japanese version of SF-8 was developed in October 2004. SF-8 data are compatible with a version of the MOS 36-Item Short-Form Health Survey (SF-36). Because eight items were deleted from the 36 questions of SF-36, the QOL investigation was simpler and possible to complete in a short time. SF-8 and SF-36 assess eight health concepts. These concepts are (1) Physical functioning (PF), (2) Role physical (RP), (3) Bodily pain (BP), (4) General health perceptions (GH), (5) Vitality (VT), (6) Social functioning (SF), (7) Role emotional (RE), and (8) Mental health (MH). PF, RP, BP, and GH primarily concern physical health and VT, SF, RE, and MH primarily concern mental health. The Norm-Based Scoring (NBS) of SF-36 was adopted for scoring, and the national standard value and standard deviation (SD) were adjusted to 50 and 10 points, respectively. Therefore, any item that is higher than 50 points is higher than the Japanese standard value, and any item that is lower

Table 1. Number, mean age, and age of subjects for SF-8 and SDS

	Overall	Mishima							Ohshima							P	
		-59	60-	70-	80-	Mean	SD	Median	-59	60-	70-	80-	Mean	SD	Median		
SF-8 Overall	204	39	48	93	24	69.4	9.6	71.0	103	23	16	49	15	69.4	11.7	73.0	NS
SF-8 Men	70	12	11	41	6	70.2	9.0	72.5	32	9	6	12	5	67.3	12.3	70.0	NS
SF-8 Women	134	27	37	52	18	68.9	9.8	70.0	71	14	10	37	10	70.3	11.5	74.0	NS
SDS Overall	144	29	35	58	22	69.6	9.9	71.0	101	23	16	47	15	69.4	11.9	73.0	NS
SDS Men	45	9	8	24	4	69.9	9.5	72.0	31	9	6	11	5	67.2	12.5	70.0	NS
SDS Women	99	20	27	34	18	69.4	10.2	70.0	70	14	10	36	10	70.3	11.5	74.5	NS

-59: under60 years old, 60-: 60-69, 70-: 70-79, 80-: over80, SD: standard deviation

P: statistical value for the overall mean age of men and women between Mishima and Ohshima

Table 2. Interpretation of eight concepts in SF-36

Concept	Definition of scale
Physical functioning	Limitations in physical activity because of health problems
Role physical	Limitations in usual role activities because of physical health problems
Bodily pain	Presence of pain and limitations due to pain
General health perceptions	Health conditioning
Vitality	Energy and fatigue
Social functioning	Limitations in social activities because of physical or emotional problems
Role emotional	Limitations in usual role activities because of physical health problems
Mental health	Psychological distress and well-being

than 50 points is comparably lower. We used the mean of all of the following scores. Since each item is the same as those of SF-36, the interpretation of SF-36 is listed in Table 2. SDS, which is generally and widely used to screen depressive tendencies, consists of 20 questions. The answer to each item is assigned 1-4 points, and the total is expressed as 20-80 points. A score of "less than 40 points" is defined as "not very depressed," "40-49" is "slightly depressed," and "50 points or more" is "moderately depressed." We compared Mishima and Ohshima overall, and by gender and generation (under 60, 60s, 70s, and over 80) for SF-8 and SDS. In addition, we investigated how many people were in a family and discussed whether family size affected SF-8 and SDS. We subjected the comparison between two groups to the Mann-Whitney U test for statistical significance. We decided that a difference lower than 5% ($p < 0.05$ of significance level) was significant. We used KyPlot Version 3.0 for Windows for statistical analysis.

Results

1. Subjects

Far fewer subjects answered all SDS questions in Mishima than answered SF-8. Because SDS has many items, it might be more difficult for older subjects to answer. The subjects in Ohshima often asked us questions, but those in Mishima rarely did so; therefore, many items had no answer in Mishima.

Table 3. Comparison of SF-8 scores between Mishima and Ohshima

SF-8	Mishima			Ohshima			p-value	
	Mean	SD	Median	Mean	SD	Median		
	N = 204			N = 103				
Overall	Physical functioning	45.49	7.35	48.52	47.47	5.86	48.52	p<0.05
	Role physical	46.07	7.65	48.47	48.17	6.62	48.47	p<0.05
	Bodily pain	47.04	7.97	46.19	48.17	8.17	46.19	NS
	General health perceptions	48.96	6.04	50.71	49.96	7.32	50.71	NS
	Vitality	50.12	6.61	54.48	51.45	5.42	54.48	NS
	Social functioning	48.01	8.12	54.74	50.97	5.81	54.71	p<0.01
	Role emotional	48.24	7.23	49.07	50.12	6.45	54.30	p<0.01
	Mental health	49.85	6.58	50.28	51.36	5.87	50.28	NS
	N = 70			N = 32				
Men	Physical functioning	46.30	8.12	48.52	46.83	6.16	48.52	NS
	Role physical	46.41	8.57	48.47	46.03	8.36	48.47	NS
	Bodily pain	48.80	8.77	46.19	47.43	8.69	46.19	NS
	General health perceptions	49.57	7.11	50.71	49.89	7.53	50.71	NS
	Vitality	51.65	6.83	54.48	51.30	4.98	54.48	NS
	Social functioning	47.78	9.16	54.74	49.82	6.42	54.74	NS
	Role emotional	48.24	9.49	49.07	48.77	6.68	49.07	NS
	Mental health	50.62	7.15	50.28	49.98	6.38	50.28	NS
	N = 134			N = 71				
Women	Physical functioning	45.07	6.91	41.93	47.76	5.74	48.52	p<0.01
	Role physical	45.89	7.14	48.47	49.13	5.46	48.47	p<0.001
	Bodily pain	46.12	7.39	46.19	48.51	7.96	46.19	p<0.01
	General health perceptions	48.64	5.40	50.71	50.00	7.27	50.71	p=0.086
	Vitality	49.32	6.37	49.88	51.51	5.65	54.48	p<0.05
	Social functioning	48.13	7.55	54.74	51.49	5.49	54.74	p<0.01
	Role emotional	48.24	5.75	49.07	50.72	6.30	54.30	p<0.001
	Mental health	49.46	6.26	50.28	51.99	5.56	50.28	p<0.01

2. SF-8 (Tables 3 and 4)

The only item over 50 points in Mishima was VT, and all women were under 50 points. Overall, in Ohshima, VT, SF, RE, and MH, which expressed issues of mental health, exceeded 50 points, and women's scores exceeded men's overall. Based on gender differences, the scores of the younger generations of Mishima men were higher, but the score of one of the older generations of Ohshima women was higher. There were hardly any differences among generations for Mishima women and Ohshima men. In comparing Mishima and Ohshima overall, all item scores of Ohshima were higher than those of Mishima. In particular, PF, RP, SF, and RE of Ohshima were significantly higher. The overall scores of men in Mishima and Ohshima did not show any significant difference, but the scores of the women in Ohshima were significantly higher except for GH. The difference between the overall scores in Mishima and Ohshima reflects the differences in the women's scores. Furthermore, as for generations, the scores of men in

Table 4. SF-8 scores by generation and gender

Age	SF-8	Men							Women						
		Mishima			Ohshima				Mishima			Ohshima			
		Mean	SD	Median	Mean	SD	Median	P	Mean	SD	Median	Mean	SD	Median	P
		N = 12			N = 9				N = 27			N = 14			
under60	PF	49.01	4.85	58.52	49.60	5.80	51.08	NS	48.07	5.54	48.52	48.17	5.25	48.52	NS
	RP	50.20	4.37	51.19	48.49	7.55	51.19	NS	48.61	5.13	48.47	49.62	4.69	48.47	NS
	BP	48.78	7.83	51.75	50.21	10.2	48.97	NS	45.37	6.47	46.19	49.66	8.16	46.19	NS
	GH	52.04	3.11	50.71	47.37	9.07	50.71	NS	48.16	4.91	50.71	45.70	7.68	50.71	NS
	VT	52.58	6.00	54.48	50.99	6.70	54.48	NS	51.41	4.42	54.48	50.91	5.89	54.48	NS
	SF	48.37	8.76	54.74	50.33	6.44	54.74	NS	50.40	6.50	54.74	48.37	5.56	45.23	NS
	RE	50.92	3.88	51.69	49.00	7.70	51.69	NS	48.56	4.47	49.07	50.02	3.96	49.07	NS
	MH	50.80	6.02	50.28	49.27	6.44	50.28	NS	48.24	6.24	50.28	48.94	4.54	50.28	NS
		N = 11			N = 6				N = 37			N = 10			
60-69	PF	48.45	5.52	48.52	43.25	4.56	41.93	NS	46.41	6.05	48.52	45.20	6.26	45.23	NS
	RP	48.80	5.34	48.47	42.93	13.8	48.47	NS	47.51	6.32	48.47	45.58	6.87	42.58	NS
	BP	54.10	7.89	60.22	45.32	9.26	42.05	NS	47.62	8.57	46.19	44.26	4.71	46.19	NS
	GH	50.70	7.98	50.71	50.44	5.58	50.71	NS	49.41	5.87	50.71	47.86	7.21	50.71	NS
	VT	54.68	5.25	54.48	49.88	5.04	49.88	NS	50.54	7.12	54.48	51.31	5.43	54.48	NS
	SF	50.91	6.79	54.74	47.72	8.08	49.99	NS	49.60	6.68	54.74	49.58	7.04	54.74	NS
	RE	51.56	4.06	54.30	48.41	3.66	49.07	NS	49.24	6.38	49.07	47.12	6.78	46.78	NS
	MH	51.08	7.98	57.45	47.74	6.46	47.64	NS	49.24	6.52	50.28	49.13	6.61	47.64	NS
		N = 41			N = 12				N = 52			N = 37			
70-79	PF	45.54	9.38	48.52	48.13	6.42	48.52	NS	43.07	7.81	41.93	47.64	5.80	48.52	**
	RP	44.91	9.88	48.47	46.56	6.25	48.47	NS	43.37	7.89	42.58	49.57	5.28	48.47	***
	BP	47.89	8.56	46.19	45.85	8.34	46.19	NS	45.14	6.98	46.19	48.27	8.59	46.19	*
	GH	48.66	7.74	50.71	51.79	7.97	50.71	NS	48.12	5.06	50.71	51.53	6.85	50.71	*
	VT	50.38	7.57	54.48	52.18	4.17	54.48	NS	46.99	6.34	45.27	51.88	6.06	54.48	***
	SF	47.22	9.81	54.74	50.44	6.68	54.74	NS	46.06	8.23	45.23	52.65	5.02	54.74	***
	RE	46.41	11.7	49.07	49.57	6.98	54.30	NS	47.54	5.39	49.07	52.12	3.62	54.30	***
	MH	50.57	7.71	50.28	50.08	6.98	47.64	NS	49.81	5.89	50.28	53.10	4.86	57.45	*
		N = 6			N = 5				N = 18			N = 10			
over80	PF	42.13	6.20	41.93	44.54	6.60	41.93	NS	43.60	5.83	41.93	49.62	5.53	53.64	*
	RP	44.72	8.07	42.58	45.24	8.04	48.47	NS	45.75	7.13	48.47	51.09	4.80	53.90	*
	BP	45.35	11.5	37.91	48.45	8.23	46.19	NS	46.99	7.19	46.19	51.80	7.22	51.75	NS
	GH	48.84	6.74	50.71	48.47	7.47	50.71	NS	49.24	6.21	50.71	51.99	6.86	50.71	NS
	VT	52.95	3.76	54.48	50.80	5.04	54.48	NS	50.37	5.60	54.48	50.80	4.76	54.48	NS
	SF	44.71	9.61	45.23	50.94	5.21	54.74	NS	47.72	7.59	49.99	53.79	3.01	54.74	*
	RE	49.28	4.39	49.07	47.79	9.10	49.07	NS	47.70	7.08	49.07	50.22	12.9	54.30	*
	MH	49.71	4.59	50.28	53.52	5.69	57.45	NS	50.68	6.98	50.28	56.02	3.02	57.45	*

PF: Physical functioning, RP: Role physical, BP: Bodily pain, GH: General health perceptions

VT: Vitality, SF: Social functioning, RE: Role emotional, MH: Mental health, SD: Standard deviation

P: p value, *: p<0.05, **: p<0.01, ***: p<0.001, NS: Not significant

Mishima and Ohshima also did not show any significant difference in all generations. A significant difference was seen in women aged 70 or more, but not in women younger than 70. In particular, the scores of Ohshima women in their 70s were significantly higher in all items (Figure 1).

3. SDS (Tables 5 and 6)

Overall, in Mishima, the rate of “not very depressed” was 62.5%, “slightly depressed,” 33.3%, and “moderately depressed,” 4.2%. Overall, in Ohshima, the rate of “not very depressed” was 69.3%, “slightly depressed,” 25.7%, and “moderately depressed,” 5.0%. The rate of “moderately depressed” in Mishima showed a high tendency. Although no men were “moderately depressed” in Mishima according to gender differences, the rate was comparatively high in Ohshima men and Mishima women. When comparing Mishima and Ohshima overall, the score in Mishima was 36.87 points and in Ohshima it was 36.66. According to gender differences, the men’s scores in Mishima and Ohshima were not significantly different, as was the case with SF-8. The women’s score in Mishima was 37.10 points and in Ohshima was

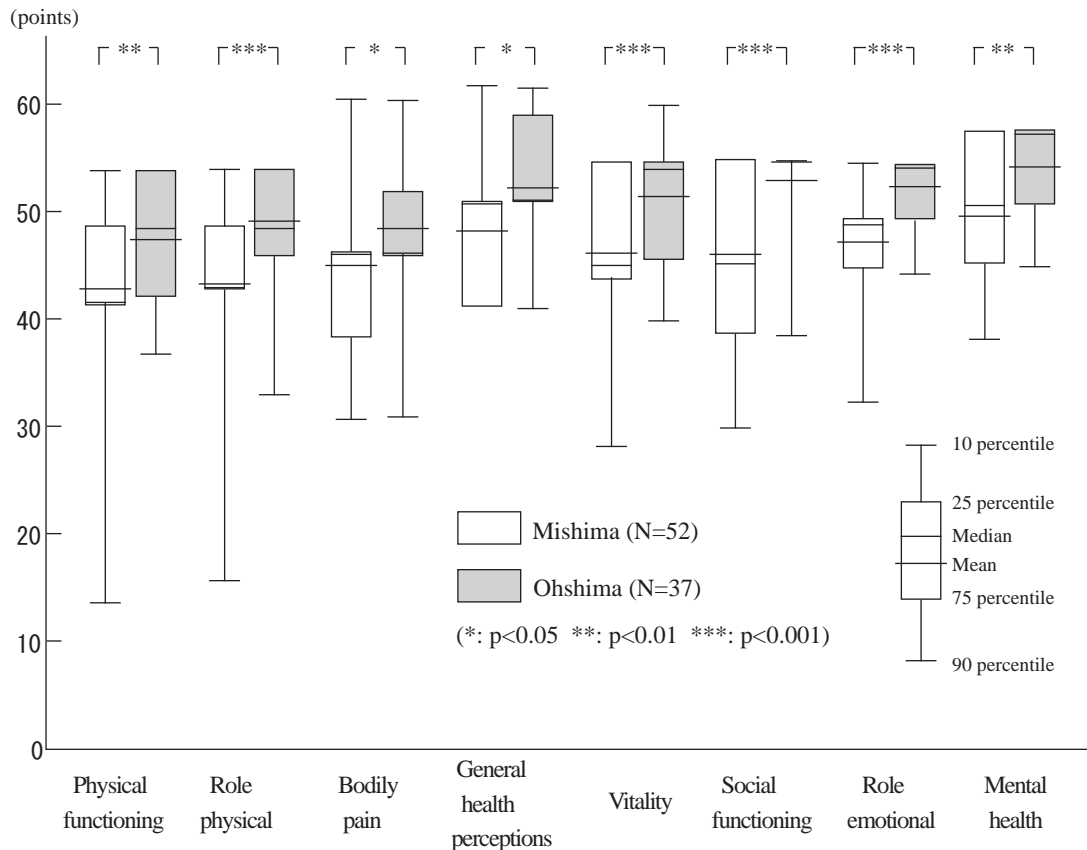


Figure 1. Comparison of SF-8 for women in their 70s between Mishima and Ohshima

Eight concepts with 100 being the highest score for each. For each box, black center line indicates the median, longer line indicates the mean, and top and bottom of the boxes indicate 25th and 75th percentiles, respectively. Outliers at the top and bottom indicate 10th and 90th percentiles, respectively.

Table 5. SDS scores of Mishima and Ohshima

		Mishima			Ohshima			N (%)
Scores (points)		under40	40-49	over50	under40	40-49	over50	
Overall subjects		90 (62.5)	48 (33.3)	6 (4.2)	70 (69.3)	26 (25.7)	5 (5.0)	
Men	Overall	27 (60.0)	18 (40.0)	0 (0.0)	20 (64.5)	8 (25.8)	3 (9.7)	
	Under60	6 (13.3)	3 (6.7)	0 (0.0)	6 (19.4)	2 (6.5)	1 (3.2)	
	60-69	5 (11.1)	3 (6.7)	0 (0.0)	3 (9.7)	2 (6.5)	1 (3.2)	
	70-79	13 (28.9)	11 (24.4)	0 (0.0)	7 (22.6)	3 (9.7)	1 (3.2)	
	Over80	3 (6.7)	1 (2.2)	0 (0.0)	4 (12.9)	1 (3.2)	0 (0.0)	
Women	Overall	63 (63.6)	30 (30.3)	6 (6.1)	50 (71.4)	18 (25.7)	2 (2.9)	
	Under60	18 (18.2)	2 (2.0)	0 (0.0)	6 (8.6)	8 (11.4)	0 (0.0)	
	60-69	18 (18.2)	7 (7.1)	2 (2.0)	8 (11.4)	2 (2.9)	0 (0.0)	
	70-79	17 (17.2)	14 (14.1)	3 (3.0)	27 (38.6)	7 (10.1)	2 (2.9)	
	Over80	10 (10.1)	7 (7.1)	1 (1.0)	9 (12.9)	1 (1.4)	0 (0.0)	

Table 6. Comparison of SDS scores between Mishima and Ohshima

		Mishima				Ohshima				p-value
		N	Mean	SD	Median	N	Mean	SD	Median	
Overall		144	36.87	8.54	38.0	101	36.66	7.21	36.0	NS
Men	Overall	45	36.36	7.81	38.0	31	37.90	7.87	36.0	NS
	Under60	9	37.78	6.85	39.0	9	37.89	8.22	37.0	NS
	60-69	8	35.38	7.42	38.5	6	40.67	8.41	40.5	NS
	70-79	24	36.13	8.82	37.5	11	36.27	8.60	32.0	NS
	Over80	4	36.50	5.97	38.0	5	38.20	6.10	35.0	NS
Women	Overall	99	37.10	8.89	38.0	70	32.77	6.07	33.5	p<0.01
	Under60	20	34.25	6.03	36.0	14	39.86	6.16	41.0	p<0.05
	60-69	27	35.37	9.07	33.0	10	34.80	7.47	32.5	p=0.784
	70-79	34	39.18	8.94	40.0	36	35.67	7.23	36.0	p=0.064
	Over80	18	38.94	10.3	39.5	10	33.80	4.37	33.5	p=0.088

32.77; the depressive tendency of Mishima women was significantly higher. As for generations, the men's scores in Mishima and Ohshima were not significantly different in all generations. The women's score in Ohshima was significantly higher at younger than 60 years old, and there was no difference in the 60s, but Mishima women tended to have higher scores when aged 70 years or more (Figure 2).

4. Family size (Table 7)

The average size of a Mishima family is 2.58, whereas it is 3.32 in Ohshima, which is significantly greater. Regarding age, Mishima families included fewer than two people when aged 60 or more. Conversely, Ohshima families included fewer than three people only when aged 80 or more and more than three at all other ages. The number of Mishima families with fewer than two people was 53.9%; only

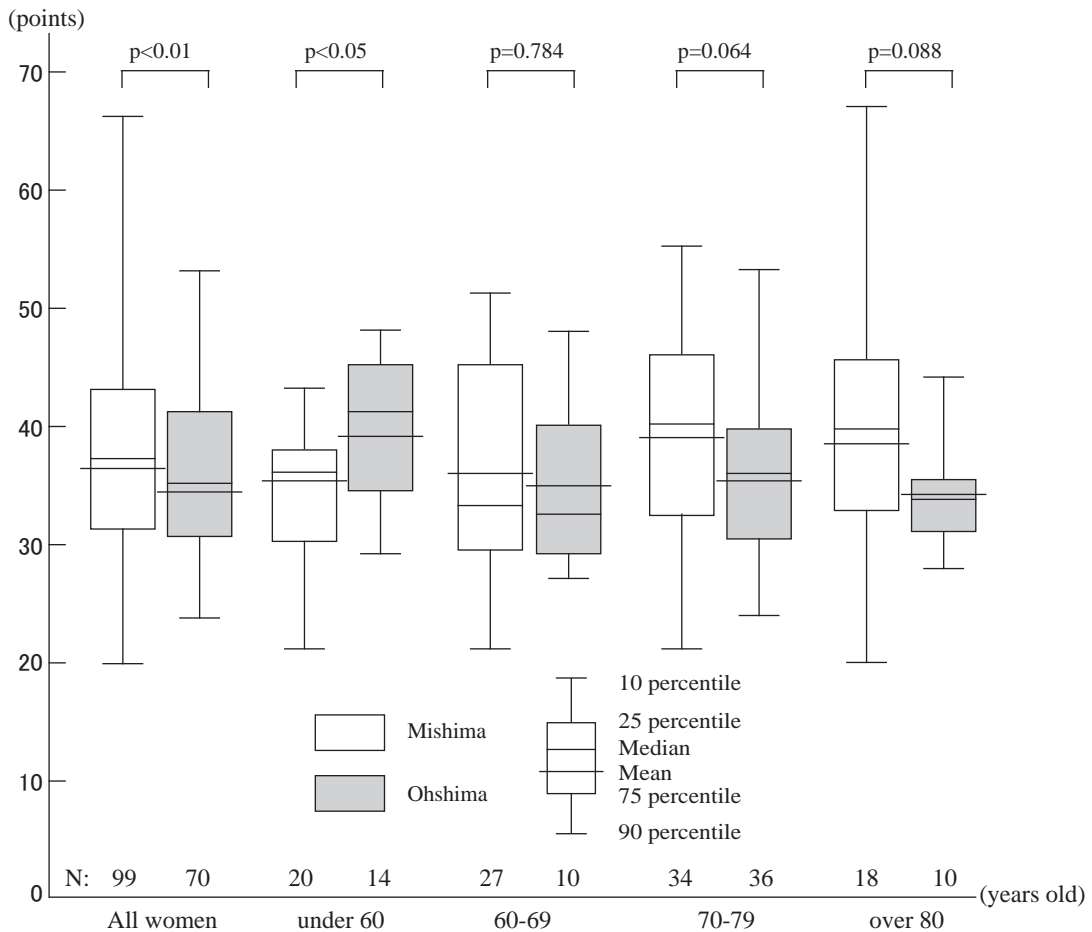


Figure 2. Comparison of SDS for women between Mishima and Ohshima

Eight concepts with 100 being the highest score for each. For each box, black center line indicates the median, longer line indicates the mean, and top and bottom of the boxes indicate 25th and 75th percentiles, respectively. Outliers at the top and bottom indicate 10th and 90th percentiles, respectively.

three families consisted of more than five people. The number of Ohshima families with more than three people was 56.3% and greater than five was 20.4%.

Discussion

We compared the results of SF-8 and SDS surveys of two islands using a basic residential examination, and gender differences were noticeable. There was no difference among men in SF-8 and SDS between islands, but there was an obvious difference among women. We believe the cause is the feudal mindset symbolized by the predominance of men over women that persists in Japanese rural areas and, therefore, women's burdens are greater than those of men. In addition, women's life expectancy is about 8 years longer than that of men in Japan, suggesting that women of advanced age who live alone contribute to the rise in the degradation of QOL and SDS. Ibtissam Sabbah et al.⁸ reported that women's QOL is not as

Table 7. Family size in Mishima and Ohshima

	Mishima									Ohshima									p-value
	Overall	1	2	3	4	5-	Mean	SD	MD	Overall	1	2	3	4	5-	Mean	SD	MD	
Overall	204	18	92	57	34	3	2.58	0.98	2	103	10	35	20	17	21	3.32	1.80	3	p<0.01
Men	70	2	36	18	14	0	2.63	0.84	2	32	1	14	3	6	8	3.56	1.92	3	p=0.063
Women	134	16	56	39	20	3	2.56	1.05	2	71	9	21	17	11	13	3.21	1.75	3	p<0.05
Under60	39	1	15	15	7	1	2.79	0.86	3	23	1	8	5	3	6	3.61	1.92	3	NS
60-69	48	1	34	11	1	1	1.77	0.42	2	16	1	8	0	1	6	3.75	1.92	2	p<0.001
70-79	93	11	41	20	20	1	1.56	0.50	2	49	5	15	9	11	9	3.31	1.71	3	p<0.001
Over80	24	5	2	11	6	0	1.75	0.44	2	15	3	4	6	2	0	2.47	0.99	3	p<0.01

1: one person, 2: two persons, 3: three persons, 4: four persons, 5-: five and more than five persons, SD: standard deviation, MD: median, p-value: statistical value of the mean for overall, men, women, under 60, 60-69, 70-79, and over 80, respectively

good as that of men; C. E. Fraser reported that women living in farmhouses have higher levels of stress, depression, and fatigue; and J. L. Fuh et al.¹² reported that the QOL of perimenopausal and postmenopausal women is lower. Generally, women's QOL tends to be low. It is interesting to note that the QOL of Ohshima women of an advanced age is higher with SF-8 and the SDS of younger Ohshima women is lower in spite of an overall significant decline in Mishima women. As a geographic condition, Mishima suffers severely with regard to travel because it is far from the mainland. There are fewer facilities for cruise ships, and the percentage of voyage cancellations is higher than for Ohshima. Haynes and Gale⁶ have shown that social variation in health in rural communities is apparent not at a regional level but at the level of individual households. However, Joseph et al.⁵ report that travel inconvenience exacerbates poor health, a lack of social support increases the suicide rate, and a dense personal social network conversely decreases stress and acts to promote health. It can be seen that, as a result, the means of transportation and individual and social networks reflect QOL. In addition, Jan Nilsson¹³ states that advanced age, poor household economic status, and low social interaction at the individual and community level decrease QOL. The rate of aging in Mishima is also higher, and it seems that many households consist of an aged husband and wife based on family size. Because we did not investigate economic status, this cannot be confirmed, but geographic conditions and family structure reflected these results in this study. In other words, in Mishima, the burden of aged women is great because of the large number of households consisting of a husband and wife of advanced age. In Ohshima, the burden of young women is great because of the large number of big families. Based on this tendency, it seems that we must promote health care and medical activities in the future, focusing on support for women.

This investigation did not extend to all islanders. We only covered residents who had a medical check-up in 2005 at Mishima or Ohshima clinic. In addition, because not all participants responded to SF-8 and SDS, it is unclear whether these results reflect the perception of all islanders. However, it was very difficult to obtain agreement from all islanders, and we regard our results as lines of investigation for a questionnaire pattern.

Conclusion

We investigated QOL and SDS on two islands, Mishima and Ohshima. There were no significant differences among men with reference to QOL and SDS, but the difference among women was pronounced. The QOL of older women in Mishima was low, and the SDS of younger women in Ohshima was low. The difference in family structure was regarded as the cause of these differences; that is, there are many households with only an elderly husband and wife in Mishima, and there are many big families in Ohshima. On that basis, it seems that we must promote health care and medical activities in the future, focusing on support for women.

- ¹ Toshinori Kitamura, Norito Kawakami, Shinji Sakamoto, Takeshi Tanigawa, Yutaka Ono, Shigeki Fujiwara. Quality of life and its correlates in a community population in a Japanese rural area. *Psychiatry and Clinical Neurosciences* 2002; 56: 431-441.
- ² Ruoling Chen, Li Wei, Zhi Hu, Xia Qin, John R. M. Copeland, Harry Hemingway: Depression in Older People in Rural China. *ARCH INTERN MED.* 2005; 165: SEP 26.
- ³ Einar Kringlen, Sverre Torgersen, Victoria Cramer. Mental illness in a rural area: A Norwegian psychiatric epidemiological study. *Soc Psychiatry Psychiatr Epidemiol.* 2006; xx: 1-7
- ⁴ F. C. Papadopoulos, E. Petridou, S. Argyropoulou, V. Kontaxakis, N. Dessypris, A. Anastasiou, K. P. Katsiardani, D. Trichopoulos, C. Lyketsos. Prevalence and correlates of depression in late life: a population based study from a rural Greek town. *Int J Geriatr Psychiatry.* 2005; 20: 350-357.
- ⁵ Joseph B Tay, Cecily C Kelleher, Ann Hope, Margaret Barry, Saoirse Nic Gabhainn, Jane Sixsmith. Influence of sociodemographic and neighbourhood factors on self rated health and quality of life in rural communities: findings from the Agriproject in the Republic of Ireland. *J Epidemiol Community Health.* 2004; 58: 904-911.
- ⁶ Robin Haynes, Susan Gale. Mortality, long-term illness and deprivation in rural and metropolitan wards of England and Wales. *Health & Place* 1999; 301-312.
- ⁷ Su-Ying Tsai, Lin-Yang Chi, Liang-Shong Lee, Pesus Chou. Health -related quality of life among urban, rural, and island community elderly in Taiwan. *J Formos Med Assoc.* 2004; Vol 103. No 3: 196-204.
- ⁸ Ibtissam Sabbah, Nabil Drouby, Sanaa Sabbah, Nathalie Retel-Rude, Mariette Mercier. Quality of Life in rural and urban populations in Lebanon using SF-36 Health Survey. *Health and Quality of Life Outcomes.* 2003; 1: 30.
- ⁹ Scott Weich, Liz Twigg, Glyn Lewis. Rural / non-rural differences in rates of common mental disorders in Britain. *British Journal of Psychiatry.* 2006; 188: 51-57.
- ¹⁰ Taizo Wada, Masayuki Ishine, Teiji Sakagami, Toru Kita, Kiyohito Okumiya, Kosuke Mizono, Terry Arthur Rambo, Kozo Matsubayashi. Depression, activities of daily living, and quality of life of community-dwelling elderly in three Asian countries: Indonesia, Vietnam, and Japan. *Archives of Gerontology and Geriatrics.* 2005; 41: 271-280.
- ¹¹ Fukuhara S, Suzukamo Y. *Manual of the SF-8 Japanese version: Institute for Health Outcomes & Process Evaluation Research, Kyoto, 2004*
- ¹² J. -L. Fuh, S. -J. Wang, S. -J. Lee, S. -R. Lu, K. -D. Juang. Quality of life and menopausal transition for middle-aged women on Kinmne island. *Quality of Life Research.* 2003; 12: 53-61.
- ¹³ Jan Nilsson, A. K. M. Masud Rana, Zarina Nahar Kabir. *Social Capital and Quality of Life in Old Age.*

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隣接する離島間での QOL および 簡易うつスケール (SDS) の比較

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和文抄録

目的

隣接する離島住民の QOL と抑うつ傾向を調査・比較することである。

方法

2005年に見島診療所と大島診療所で基本健診を受けた住民を対象として、書面にて同意の得られた受診者に SF-8 と SDS を行った。SF-8 に全解答した人は、307名（見島：204名、大島103名）で、平均年齢は見島が69.4歳、大島が69.9であった。同様に SDS は245名（見島144名、大島101名）で、年齢は見島69.5、大島69.9であった。

結果

全体では大島の QOL が高く、SDS は低くなった。しかし、男性は全く差が無く、女性の差が著明であった。QOL は大島の高齢者が高かった。SDS は全体では大島が低かったが、年代別では若い大島の女性が高かった。

結語

全体的に女性の負担が大きく、大家族の多い大島は若い女性に、夫婦2人の世帯が多い見島では高齢女性に負担が大きいと推察された。この傾向を踏まえて、保健医療活動を行う必要がある。

(キーワード：QOL, SF-8, SDS, 離島)

1 大島診療所 (現：都志見病院 総合診療科)

2 見島診療所 (現：中部労災病院 心療内科)