Relationship between Psychological Adjustment and Occupation in Laryngectomized Patients in Japan

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Objectives

The purpose of this study was to clarify the relationship between the psychological adjustment laryngectomized patients and changes in their working situation.

Methods

Recruit: A total of 27 participated in the study.

Setting: From a population of candidates scheduled to undergo laryngectomy for perilaryngeal cancer at the head and neck wards of a cancer Hospital and three local regional hospitals.

Surveys (four times): Before surgery (face-to face), three months, six months, and a year after discharge (by mail).

Dependent variable: Psychological adjustment (NAS-J-L)

Independent variables: Occupation before surgery, Currently working, and the reason for retirement if they were retired.

Basic characteristics: Age, gender, family structure (living alone, or with two or more people), diagnosis, surgical procedure, and psychological problems at discharge such as difficulty swallowing and constipation.

Analysis: A repeated measures GLM method

Interactions (occupation and age, and the variables of occupation and family structure)

Gender was excluded as a control factor, because only four of the respondents were women.

Psychological adjustment was rated using a top score of 100 points.

Instruments:

The Japanese version of the Nottingham Adjustment Scale, Laryngectomy (NAS-J-L), modified by Yaguchi et al. (2004): seven subscales and 27 items that using a 4-5 point Likert scale of the each item.

- (i) anxiety/depression: six items (e.g., "I have no energy and feel depressed")
- (ii) self-esteem: three (e.g., "I feel totally useless from time to time")
- (iii) self-knowledge: three (e.g., "I do not need to be anxious about losing my voice")
- (iv) positive affirmation: six (e.g., "I feel that my life is very significant even after losing my voice")
- (v) attitude: four items (e.g., "Many people with vocal impairments generally consider losing their voices as the worst incident to have happened")
- (vi) self-efficacy: three (e.g., "I tend to give up easily")
- (vii) locus of control: two (e.g., "I will make only very little progress in rehabilitation")

Attributional style, which was part of the original scale, was found to work differently from other subscales (Dodds et al., 1993).

Consequently, it was proposed to be excluded by Suzukamo et al. (2006) and was thus excluded from the NAS-J-L.

The higher the points in each subscale, the higher the psychological adjustment.

This scale has established reliability (Cronbach's alpha coefficients: 0.69–0.91), validity of the structural concept, and criterion-related validity.

Table 1 Basic	characteristics		N=	27 Table 2	Occupation				N = 27	Table 3. Psycholog	ical adjustment in 1	Laryngectomized po	tients (Total scor	re)					N:
mean ± S.D (range)				(%)				N(%)		-Psycholigical		efore surgery		three months after d	ischarge	six months after d	echarge	a year after	discharge
Age	62.9±6.4		,07 11	(14)		before	three months after discharge	six months after discharge	a year after discharge	adjustment total s	core mean	±SD (range)	median	mean ± S.D (range)	nedian	mean ± S.D (range)	nedian	mean ± S.D (ran	nge) ns
64 years ≦	02.0 - 0.1	(10 10)	19	(70.4) employ	99	surgery 9 (33.3	8 (29.6)			Anxiety/depression	763±182 (22.2 - 100i	77.8 78.8	±23.4 (16.7 · 100)	83.3	73.88±25.8(27.8·100)	816	76.7±25.9 (0 · 100)	
65 years ≧				(29.6) Unemp		18(66.7)				Self-esteen	722±17.6(4			±246(8.3-100)	75.0	62.8 ± 23.4 (25 · 100)	62.5	645±425(83:100	
,					easons (Allowed	multinle answe	rs)			Self-knowledge			513	±21.0(0-75)	542	50.3±27.9(0-100)	542	53.1 ± 26.5 (0 · 100)	
Gender	Male		23	(85.2)						(Acceptance of disc Positive affirmation									
	Female			14.8) Man	datory retiremen	nt 11 (61.1)	13 (68.4)	11 (61.1)	12 (60.0	(Acceptance of disal			WWW 57.2	±20.1 (4.2 - 75)	62.5	57.1 ± 22.1 (4.2 · 100)	62.5	59.9 ± 23.3 (4.2 · 95.8	į.
					ss of voice	5 (27.8				Attitude	47.5±19.2()			±20.8(0-81.3)	50.0	44.9±24.4(0-87.5)	43.8	48.1 ± 23.5 (0 · 100)	
Family structu	re Living alo	ne	5 (ression ructuring	1 (5.6 1 (5.6				Self-efficacy Lucus of Control	642±227(648±163()			± 17.4 (25 · 100) ± 20.3 (12.5 · 100)	75.0 50.0	59.9 ± 26.6 (25 · 100) 59.7 ± 21.7 (0 · 100)	66.7 62.5	60.5±23.9(25·100) 61.6±24.2(0·100)	
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Table 4-1.	The Results of m	ain effect s	ınd interac	tion by m	ultiple reg	ression an	alysis			•	•					$\overline{}$		— 6	64 years :
Psycholog Multiple	ical adjeutment	Main			depression			Main			esteem			90	/		/_	er	mployee
regression analysis	model	Main	Interaction 1-3	Interaction 1-2	Interaction 1-3	Interaction 2-①	Interaction 2-②	Main effect	Interaction 1-①	Interaction 1-2	Interaction 1-3	Interaction 2-①	Interactio 2-©	n					64 years S
	period age	* * *	***	* * *	* * *	-	* * *	* * *	* * *	* * *	* * *	-	* * *	7			_	u u	nemploye
Main effect	family preogrative	***	***	***	* * *	***	**	**	*	*	*	**	**	70 —					
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Interaction 1	3 period/occpation			-	_					-	_								
Interaction	① period/ age/ occupation					+						-		50	na numanni	three months six mont	v after a un		65 years 2
2	② period/family/ occupation						-						-			efter discharge disch iety/depression (age			nemploye
Table 4.2.	The Results of m	ain effect s	ind interac			ression an	alysis							_	rig.1 Anx	ety/depression (ago	and occup	ation) interactio	n
Psycholog	rical adjeutment		CA	Self-Knowledge (Accomptance of disability					u	Positive : Leceptanes	Positive affirmation cceptance of disability					Attit	ude		
Multiple regression	model	Main	Interaction 1-(1)	Interaction 1-2	Interaction 1-3	Interaction 2-(1)	Interaction 2-(2)	Main	Interaction	Interaction 1-②	Interaction 1-(3)	Interaction 2-(1)	Interactio	n Main offect	Interac		Interaction	Interaction 2-(1)	Interac
analysis	period	-	-	-	-	-	-	-	-	-	-		-	effect -	-	-	-	-	
Main effect	age family	***	***	* * * *	* * * *	-	***	* * *	-			+	**	**		* *	-	***	* *
	precerative occupation	-	-	-	-	-	-	-	-	-	-	**	-	-	-	-	-	**	_
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Interaction	② period/occpation ① period/ age/					-					-	**		1	-			+	
2	② period/family/ ocuunation						-						-						-
	The Results of m	ain effect s	and interac			ression an	alysis							-					
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regression analysis	model	effect	1-3	1-2	1-3	2-①	2-2	effect	1-①	1-2	1-3	2-①	2-2		\	\sim			— 64 vi
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Interaction 2	occupation period/family/					_	_			-		_	+	-	Fig.2 A	ttitude(age and o) interaction	
+ p < 0.1	ocuupation	* p <.05		** p < .0				*** p < .0	01		- :Non	significant		80					
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For working patients living in two-person households, there is the possibility of a sense of loss in being able to hold a social role. Also, results suggested that compared with retiring older patients, working older patients experience more problems.