## The Influence of Participation in Self-Help Groups on Laryngectomized Patients

Haba, K. <sup>1</sup>0, Kotake, K. <sup>1</sup>0, Iwanaga, K. <sup>2</sup>0, Suzukamo, Y. <sup>3</sup>0, Kai, I. <sup>4</sup>0, Takahashi, A. <sup>5</sup>3, Nagamatsu, Y. <sup>6</sup>0, Kawamoto, R. <sup>7</sup>0 Juntendo University, Faculty of Health care and Nursing, Urayasu City<sup>3</sup>1, School of Nursing, Faculty of Medicine, Fukuoka University, Fukuoka City<sup>5</sup>2, Department of Physical Medicine and Rehabilitation, Tohoku University Graduate School of Medicine, Sendai City<sup>5</sup>1, The University of Tokyo, Tokyo <sup>6</sup>1, Saitama Prefectural University, Faculty of Health Sciences, Department of Nursing, Koshigaya City<sup>6</sup>1, University of Occupational and Environmental Health Department of Nursing, Kitakyushu City<sup>6</sup>0, Japanese Nursing Association, Tokyo<sup>7</sup>1, JAPAN

## Objective

The purpose of this study is to clarify factors affecting laryngectomized patients' participation in self-help groups(SHG) and to examine the support for laryngectomized patients' participation in SHG and for the promotion of their social participation.

## **Methods**

Subjects were 893 laryngectomized patients who agreed to participate in this research among 1,828 laryngectomized patients registered in SHG groups in Tokyo and Kyushu-Okinawa region in Japan. Survey content was basic attributes (age, sex, the number of years after undergoing laryngectomy, occupation at the time of investigation, family structure, and the main method of conversation) and the experience of participation in SHG. We mailed questionnaires to every subject. We conducted mail question-naire survey in this study. We calculated descriptive statistics about basic attributes. For conducting a significance test the types of communication methods of larvngectomized patients and family structure were separated into two groups: patients who mainly used either esophageal speech or tracheoesophageal shunt (TE shunt) speech and patients who used other methods for communication, and those who live alone and those who live with other family members, respectively. A t-test was conducted on the experience of participation in SHG and age (p < 0.05). A  $\chi$ 2 test was conducted on the experience of participation in SHG, communication methods, occupation, and family structure (p < 0.05). This research was approved by Ethical Review Committee of a university authors belonged to. We explained to subjects the purpose of this research, voluntary participation in this research, and the policy that the signing of the letter of consent or the returning of questionnaires was treated as an agreement to participate in the research.



The average age of subjects was 70.8 years (ranging from 39 to 95 years, the lower quartile is 65 years old). 90.7% of subjects were male. Those who underwent laryngectomy more than 5 years ago were 562 (65.8%). The subjects who had occupation were 263 (31.4%) and who lived alone were 75 (8.6%). The main methods of communication (multiple answer) were as follows: those who used esophageal speech, TE shunt speech, electrolarynx, conversation by writing, and gesture were 565 (63.3%), 20 (2.2%), 244 (27.3%), 189 (21.1%), and 99 (11.1%), respectively. There were also a few people who used PCs, cellphone's email, fax machines, and the movement of lips as medium of communication. On participation in SHG, participation was 274 (33.4%) and nonparticipation was 547 (66.6%). The average age of partici-pation and non-participation was 69.7 years old and 71.2 years old, respectively. 568 subjects (69.2%) used esophageal or shunt speech and 253 subjects (30.8 %) used other communication methods. Those who had occupation were 250 (31.2%) and those who live alone were only 69 (8.3%). A t-test showed that the average age of those who participated in SHG was younger than those who did not (p = .020). A  $\chi$ 2 test showed that the former were more likely to use esophageal speech or TE shunt speech than the latter (p = .001). There was no statistically significant relationship between the participation in SHG and occupation. On family structure those who lived alone were less likely to participate in SHG than those who lived with family (p = .033).

Table 1 Reasons of The Influence of Participation in SHG on Laryngectomized Patients

Age			The main methods of conversation			Occupation			Family structure			
				esophageal or TE shunt speech	others		in employment	out of employment		live-alone	live with family	
		mean	p value	N (%)	N (%)	p value	N (%)	N (%)	p value	N (%)	N (%)	p value
Participation in SHG	participation	69.7		211 (77.0)	63 (23.0)	.001		181 (67.3)	519	15 (5.4)	263 (94.6)	033
	non- participation	71.2	020	357 (65.3)	190 (34.7)		162 (30.5)	370 (69.5)		54 (9.8)	496 (90.2)	

## **Onclusion**

SHG of laryngectomized patients in Japan are the places for exchange on the training of communicative methods such as esophageal speech and electrolarynx as well as the places for sharing one another's experience and talking to each other about one's problems such as the life after surgery. In this study we found that patients who use esophageal speech or TE shunt speech were more likely to participate in SHG. It is considered that this is due to their current activities.

Participants in SHG tended to be younger than non-participants. Japanese people who are below 65 years usually have jobs and assume a vital role in social activities. This suggests that participants in self-help groups include those who try to be reemployed by acquiring esophageal speech. Yet, in this research there was no association between occupation at the time of investigation and participation in SHG at a statistically significant

level. This suggests that although patients are likely to participate in SHG for gaining communication skills with others by esophageal speech for rehabilitation in society, participation in SHG does not necessarily promote their extensive social participation such as their reemployment or the recovery of their previous vocational status. Therefore, we need to examine factors which promote their social participation in future research.

This research also found out that patients who lived alone were less likely to participate in SHG than patients who lived with family members, implying that the level of daily exchange with family members might promote their social We considere that laryngectomized patients who lived alone were less likely to gain support not only from their family but also peers. It will be necessary to examine the support system for laryngectomized patients who live alone.