







International Lymphoedema Framework -Chronic Oedema Outcome Measure



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## Introduction and Aim

- We investigated ILF-COM from 2018 to 2019 as a part of International lymphedema Framework Japan.
- We were offered this opportunity by Prof. Christine Moffatt and ILF board members on August 2018.
- We investigated the outcome measures of lymphedema used in Japan.





We analyzed 205 responses.

Table1. Differences of characteristics and outcomes between lymphoedema specialists and non-specialists

		Non-specialists (N=129)		lymphedema		Total (N=205)		P value
Professions	Nursos	108	(85)	51	(67)	159	(78)	
110163310113	Physicians	108 A	(2)		(07)	2 2 2	(70) (A)	
	Physiotheranists	+ 7	(5)	12	(3)	20	(4)	002
	Occupational theranists	י ג	(0)	13 5	(1)	20	(10) (A)	0.02
	Othor	5	( <i>二</i> ) ( <i>八</i> )	2	( <i>1</i> )	2 Q	(4) (1)	
Vears of evneri		15	(+) (7_27)	18	(+) $(1/_2/)$	17	( <del>4</del> ) (10_25_5)	
		10	(/ <sup>-</sup> ∠/)	01	(11)	エ / つ フ	$(10^{-2} J.J)$	
workplace	Community	19	(15) (F1)	ð FC	$(\perp \perp)$	27 122	(13)	
	HOSPILAI	60	(51)	50	(74)	ΤΖΖ	(60)	
	lymphedema specialist	0	0	Г	(7)	Г	(2)	0.00
	Center	0	0	5	( / )	S O	(2)	0.00
	A and a minimistic center		U (20)	0	(Q)	40	(20)	
	Academic institution	30	(28)	0	(8)	42	(20)	
	Other	8	(6)	Т	(1)	9	(4)	
Years of experience in lymphedema				7	(2.5-11.5)			
management		1 /	(11)	40	(C1)	FC	(20)	0.00
Severity		14	(⊥⊥) (1)	42	(bl) (1)	50	(29)	0.00
CIASSIFICATION		1	(⊥) (1)		(⊥) (⊥)		(⊥) (⊃)	0.18
	Lympn-ICF	T	(1)	3	(4)	4	(2)	0.10
	Don't know	105	(86)	26	(38)	131	(69)	
Circumferences	Without calculating							
	volume	52	(42)	62	(89)	114	(59)	0.00
Volumetric	Circumferences	21	(18)	46	(75)	67	(38)	0.00
	Perometer	0	0	2	(3)	2	(1)	0.13
	Water displacement	0	0	2	(3)	2	(1)	0.05
	Don't know	95	(82)	13	(21)	108	(61)	
Evaluation	Picture	20	(17)	46	(66)	66	(35)	0.00
	Moisture meter	2	(2)	4	(6)	6	(3)	0.12
	Ultrasonography	8	(7)	24	(34)	32	(17)	0.00
	DEXA	0	0	1	(1)	1	(1)	0.19
	MRI	1	(1)	2	(3)	3	(2)	0.28
	Bio impedance	1	(1)	8	(11)	9	(5)	0.00
	Lymph scintigraphy	4	(3)	4	(6)	8	(4)	0.43
	ICG	2	(2)	8	(11)	10	(5)	0.00
	Wound type	4	(3)	7	(10)	11	(6)	0.06
	Wound size	17	(14)	14	(20)	31	(16)	0.30
	Don't know	84	(71)	10	(14)	94	(50)	
Determining	Episode of cellulitis	48	(39)	62	(84)	110	(56)	0.00
deterioration	Hospitalization	13	(11)	19	(26)	32	(16)	0.00
	Complications of							
	treatment	10	(8)	25	(34)	35	(18)	0.00
	Weight/BMI (overweight)	27	(22)	46	(62)	73	(37)	0.00
	Don't know	60	(49)	8	(11)	68	(35)	
Psychosocial	Quality of life	58	(47)	62	(86)	120	(61)	0.00
effect	Pain	40	(32)	39	(54)	79	(40)	0.00
	Mobility	33	(27)	42	(58)	75	(38)	0.00
	Patient adherence	12	(10)	31	(43)	43	(22)	0.00
	Don't know	48	(39)	5	(7)	53	(27)	

Board meeting of ILF-COM in Japan (31st Aug, 2018)

We undertook ILF-COM *self* administrated questionnaire survey in Japan following board members' contribution in each area.

Activity

\*\*Prof. Junko Sugama, RN, PhD Dr. Aya Sato, RN, PhD Prof. Ayako Okutsu, RN, PhD Prof. Yumi Sakuda, RN, PhD

Dr. Noriko Kobayashi, MD

Prof. Emiko Kimura, RN, PhD Prof. Shizuko Murayama, RN Prof. Toyoko Yoshizawa, RN, PhD

Ms. Yoko Arai, RN

\*Prof. Hiromi Sanada, RN, PhD rof. Mariko Masujima, RN, PhD



## \*President of ILF Japan **\*\*ILF-COM research manager**

- ILF-COM research coordinator Dr. Misako Dai, RN, PhD
- **ILF-COM** data analysis Dr. Gojiro Nakagami, RN, PhD
- We translated the ILF-COM questionnaire into Japanese followed by back translation into English to assure the translation quality.
- Questionnaire were answered via e-mail or mail.
- We put this data to both ILF and ILF-J databases.
- We compared the differences of characteristics and outcomes between lymphedema specialist and non-specialists.
- Lymphedema specialist are determined who have experience in  $\bullet$ lymphedema management.
- We compared the differences of characteristics (professions and their workplace) between ultrasonography users and ultrasonography non-users within the lymphedema specialist group.
- Statistical analyses were performed by Pearson chi-square test or Fisher's exact probability test using Stata/SE 15.0 (Stata Corp). lymphedema center

Table2. Differences of characteristics between ultrasonography-users and non-users

		No	n-	Illtrac	onography	т	atal	n
		ultrasonography		Ollasonography		TOLAT		μ
Professions (n=69) Nurses		32	(69)	12	(52)	44	(5)	0.02
	Physicians	0	(0)	4	(17)	4	(63)	
	Physiotherapists	10	(21)	3	(13)	13	(8)	
	Occupational therapists	3	(6)	2	(8)	5	(7)	
	Other	1	(2)	2	(8)	3	(4)	
Workplace (n=63)	Community	6	(14)	1	(4.5)	7	(11)	0.05
	Hospital	34	(83)	17	(77.2)	51	(81)	

Data: N(%), median (interquartile range)

(2)



1. There are no standardized methods that are used for lymphedema severity assessment. 2. ISL is the most common classification used, but only 60% of lymphedema specialists used. 3. lymphedema specialists use technologies such as ultrasonography. Spreading the standardized evaluation by ultrasonography will be the next target in Japan. This will contribute to lymphedema management for health care providers in both hospital and community.

(18.2)

Hands-on program in International summer program, Tokyo, 2018

Lecture for lymphedema therapists, Ishikawa, 2018

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