## The Tenth International Conference on Global Health Challenges

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## **Approaches for Promoting Telemedicine Utilization in Japan**

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# **Short Bio**

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- Investigate people's willingness to use telemedicine in Japan.
- Identify community perspectives and needs to develop telemedicine and increase service utilization.

### Method

- Semi-structured questionnaire (9 multiple-choice questions) was undertaken with 84 participants (63 Female and 21 male) between February and April 2021.
- Selecting the survey participants was based on their busy works with limited vacations time to visit hospitals.
- The interview guide was informed by a literature survey in this study area.
- Ethical approval for the study was obtained from the Kyushu University Hospital, Permission No 2021-15.

- The participants' ages are ranging from 20 to 64 years.
- They are administrative employees working in different business sectors at 2 public universities in the Fukuoka city.
- All participants have no physical disabilities, and they had never experienced telemedicine.
- The majority visit the hospitals about 2 times a year.



### Table 1The Characteristic of Participants

Gender N=84	Age	N=84	Physical Disability		Occupation Administrative Employee	N=84	Hospital Visit	in a year	N=84	Awareness of Telemedicine	Experience of Telemedicine
Female	20-29	17 (20%)	No	Fukuoka	University A	N 53 (63%)	Once a week	52 times	2 (2%)	Very much	No
N 63 (75%)	30-39	16 (19%)			University B	N 31 (37%)	Once every 2 weeks	26 times	2 (3%)	N 14 (17%)	
	40-49	28 (34%)					Once a month	12 times	16 (19%)	Somewhat	
	50-59	17 (20%)					Once every 2 months	6 times	6 (7%)	N 59 (70%)	
Male	60-69	6 (7%)					Once every 6 months	2 times	24 (29%)	Not at all	
N 21 (25%)							Once a year	One time	12 (14%)	N 11 (13%)	
							No visit	0	0		
		1					No answer		22 (26%)		
100%	100%	100%				100%			100%	100%	





Multiple-choice question



No

N=8

N=37

44%

I'm not

sure

N=39 **46%** 

Yes

Figure 1. Telemedicine utilization in Japan (N=84) - Q.1 and Q.2

#### **Q.3 What are the issues that could be well addressed through online care services?** See Figure 2



Figure 2. Issues that require telemedicine utilization (N=84) - multiple-choice question

#### Q.4 What are your needs and opinions to improve telemedicine service? See Figure 3



Figure 3. Participants' Needs to improve a telemedicine program (N=84) - Multiple-choice question

### **Usability in a Telemedicine Meeting**



#### Figure 4. Best model of telemedicine usage (N=84)

### Discussion

To increase the use of telemedicine, it is better going beyond traditional home diagnostic to include further medical care forms where the individuals' abilities are restricted.

The majority indicated that telemedicine is a good tool for virtual visits to inpatients by their relatives and/or conducting remote follow-up meetings with the family members who are unable to be with their patients at hospitals.

In order of importance, 6 actions are suggested to develop telemedicine and encourage patients to use the service:

- 1. Creating telemedicine equipment as user- friendly as possible.
- 2. Providing telemedicine services in the greater number of hospitals.
- 3. Offering telemedicine services for patients at any time, day or night.
- 4. Offering many value-added programs to the telemedicine patients.
- 5. Considering high-speed Internet to faster upload and/or download time.
- 6. Considering telemedicine desires by age demographic.

## Limitation

The survey was done with limited number of Japanese participants, and the results cannot be generalized beyond the participants of a study.

The participants expressed their own opinions to increase the use of telemedicine service. These may not express views of the majority of Japanese people.

## Conclusion

□ Based on the participants' responses, there are two approaches to potentially increase the use of telemedicine in Japan.

First one aims to expand telemedicine capabilities. This is by identifying community concerns that can be addressed through online care service.

The second approach is about understanding people's needs and views to improve the telemedicine service. From the participants' feedback, there are 6 actions suggested to higher use of telemedicine service. The key actions are concerning telemedicine usability, availability, value, and accessibility.

Overall, the growth of telemedicine requires fully understanding of its users.
 Patients will start demanding more use of telemedicine that is when the service satisfies their needs and expectations.

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# Thank you for your attention

**Full paper is available on the conference website** https://www.iaria.org/conferences2021/ProgramGLOBALHEALTH21.html